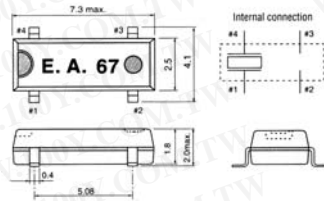


Timing Function IC

Ceramic Resonators

Detailed product specifications are available on: us.100y.com.tw

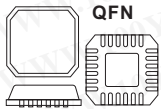


Item	Symbol	Specifications		Remarks
Nominal frequency	f	32.768kHz	32.000kHz to 100.000kHz	
Storage temperature	T _{STG}	-55°C to +125°C		Stored as bare product after unpacking
Operating temperature	T _{OPR}	-40°C to +85°C		
Maximum drive level	GL	1.0μW Max.		
Frequency tolerance (standard)	Δf/f	±20x10 ⁻⁶ , ±50x10 ⁻⁶	±50x10 ⁻⁶ , ±100x10 ⁻⁶	Ta=+25°C, DL=0.1μW
Peak temperature (frequency)	OT	+25°C ±5°C		
Temperature coefficient (frequency)	a	-0.04x10 ⁻⁶ /°C ² Max.		
Load capacitance	C _L	7pF, 12.5pF		Please specify
Series resistance	R _s	55KΩ Max	50kΩ to 20kΩ	As per below table
Motional capacitance	C ₁	1.8fF Typ.	3.0fF Max.	
Shunt capacitance	C ₀	0.9pF Typ	1.5pF Max.	
Insulation resistance	IR	500MΩ Min.		
Aging	Fa	±3x10 ⁻⁶ /year Max.	±5x10 ⁻⁶ /year Max.	Ta=+25°C ±3°C, first year
Shock resistance	S. R.	±5x10 ⁻⁶ Max.		Three drops on a hard board from 750mm or excitation test with 29400m/s ² x 0.3ms x 1/2 sine wave x 3 directions

Part No.	Product No.	Description	KHz Band	MHz Band
11836	MC-206-4.19M	SMD Resonator		4.19MHz
11837	SMD-OSC50.0000M	Ceramic Resonators	50.0000MHz	10mA

Counters / Drivers

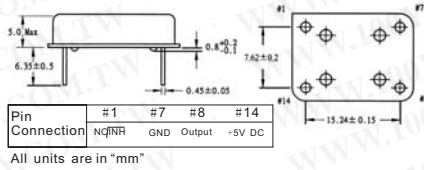
Detailed product specifications are available on: us.100y.com.tw



Part No.	Product No.	Manufacturer	Description	Pins/Package
24013	CDCM1804RTHT	T.I.	1:3 LVPECLClock Buffer & Addl LVCMOS Output	QFN

TTL/HCMOS Crystal Oscillators

Detailed product specifications are available on: us.100y.com.tw



Features

- All metal welded package
- Wide frequency range from 1.0MHz up to 13.0MHz
- CMOS IC circuit construction built-in with tri-state function
- CMOS/TTL compatible in general application
- Supply voltage: 3.3V to 5V

Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	Input Current	Rise Fall time	Operating Volt.	Package	Tol. ±ppm
33039	DS32KHZ-N	DALLAS							
24085	MCO-1510A-10MHz		14 Pins TTL Crystal Clock Oscillators	10Mhz				FULL CAN	
28104	OSC11.0592M-FULL		14 Pins TTL Crystal Oscillator	11.0592MHz			5V	FULL CAN	+25ppm
6955	OSC16.257M-FULL		14 Pins TTL Crystal Clock Oscillators	16.257	15mA	5ns	5V	FULL CAN	±50ppm
6954	OSC2.4576M-FULL		14 Pins TTL Crystal Clock Oscillators	2.4576	10mA	5ns	5V	FULL CAN	±50ppm
6921	OSC20.000M-FULL		14 Pins TTL Crystal Clock Oscillators	20.000	20mA	10ns	5V	FULL CAN	±50ppm
7857	OSC24.000M-FULL		14 Pins TTL Crystal Clock Oscillators	24.000	30mA	5ns	3.3V~5V	FULL CAN	±50ppm
28467	OSC27.000M-FULL-3.3V		14 Pins TTL Crystal Clock Oscillators	27	30Ma		3.3V	FULL CAN	25ppm
6939	OSC28.322M-FULL		14 Pins TTL Crystal Clock Oscillators	28.322	30mA	5ns	5V	FULL CAN	±50ppm
6957	OSC3.6864M-FULL		14 Pins TTL Crystal Clock Oscillators	3.6864	10mA	5ns	5V	FULL CAN	±50ppm
6952	OSC35.500M-FULL		14 Pins TTL Crystal Clock Oscillators	35.500	30mA	5ns	5V	FULL CAN	±50ppm
3328	OSC40.000M-FULL		14 Pins TTL Crystal Clock Oscillators	40.000	30mA	5ns max.	5V	FULL CAN	±50ppm
12031	OSC5.000M-FULL		14 Pins TTL Crystal Clock Oscillators	5.000MHz	10mA	5ns	5V	FULL CAN	±50ppm
6931	OSC50.000M-FULL		14 Pins TTL Crystal Clock Oscillators	50.000	25mA	6ns max	5V	FULL CAN	±50ppm
6929	OSC66.667M-FULL		14 Pins TTL Crystal Clock Oscillators	66.667	40mA	5ns	5V	FULL CAN	±50ppm
13312	OSC80.000M-FULL		14 Pins TTL Crystal Clock Oscillators	80.000	50mA	5ns	3.3V&5V	Full CAN	±50ppm
13065	OSC9.6000M-FULL		14 Pins TTL Crystal Clock Oscillators	9.6000	10mA	5ns	3.3V&5V	FULL CAN	±50ppm

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Timing Function IC

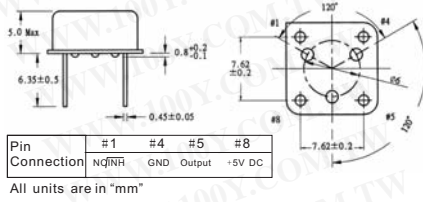
TTL/HCMOS Crystal Clock Oscillators

Detailed product specifications are available on: us.100y.com.tw

DIP-8



Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	Package
33238	HA7210IP	Intersil	Low Power Crystal Oscillator	10kHz to 10MHz	8 Ld PDIP



- All metal welded package
- Wide frequency range from 1.0MHz up to 100MHz
- CMOS IC circuit construction built-in with tri-state function
- CMOS/TTL compatible ingencral application
- Package: HALF CAN
- Tolerance/ppm: ±20ppm, ±25ppm, ±50ppm, ±100ppm

Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	Input Current	Rise Fall time	Operating Volt.	Package	Tol. ±ppm
6916	OSC10.000M-HALF		O.S.C (Half Can) 8 Pins Crystal Clock Oscillators	10.000MHz	20mA	5ns Max	5V&3.3V	HALF CAN	±50ppm
4938	OSC12.000M-HALF		O.S.C (Half Can) 8 Pins Crystal Clock Oscillators	12.000MHz	15mA	5nS	3.3V	HALF CAN	±25ppm
16843	OSC14.7456M-HALF		O.S.C (Half Can) 8 Pins Crystal Clock Oscillators	14.7456	15mA	5ns Max	3.3V&5V	HALF CAN	±50ppm
6908	OSC16.257M-HALF	QFT	O.S.C (Half Can) 8 Pins Crystal Clock Oscillators	16.257	20mA	5ns Max	5V&3.3V	HALF CAN	±50ppm
3358	OSC16.257M-HALF		14 Pins TTL Crystal Clock Oscillators	16.257MHz	50mA	5ns	5V	half Can	25ppm
13309	OSC20.000M-HALF		O.S.C (Half Can) 8 Pins Crystal Clock Oscillators	20.000	20mA	10ns	3.3V&5V	HALF CAN	±50ppm
13475	OSC22.118M-HALF		O.S.C (Half Can) 8 Pins Crystal Clock Oscillators	22.118	15mA	5nS max.	3.3V&5V	HALF CAN	±50ppm
6940	OSC25.175M-HALF		O.S.C (Half Can) 8 Pins Crystal Clock Oscillators	25.175	30mA	5ns	5V	HALF CAN	±50ppm
28493	OSC27.000M-HALF		TTL/HCMOS O.S.C (half can)	27.000MHz			3.3V	HALF CAN	+/-50ppm
13472	OSC3.6864M-HALF		O.S.C (Half Can) 8 Pins Crystal Clock Oscillators	3.6864MHz	10mA	5ns	3.3V&5V	HALF CAN	±50ppm
13474	OSC4.000M-HALF	QFT	O.S.C (Half Can) 8 Pins Crystal Clock Oscillators	4.0000MHz	10mA	5ns	3.3V&5V	HALF CAN	+/-50ppm
13307	OSC5.000M-HALF		O.S.C (Half Can) 8 Pins Crystal Clock Oscillators	5.000	25mA	6ns max	5V	HALF CAN	±50ppm

EPSON_SG-8002 Programmable Oscillators

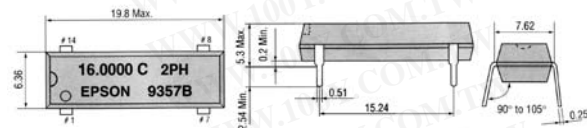
Detailed product specifications are available on: us.100y.com.tw



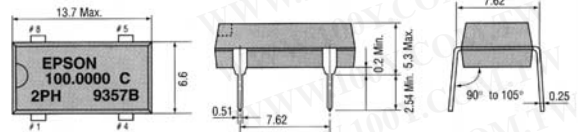
- Wide frequency output by PLL technology.
- Quick delivery of samples and short lead mass production time.
- Excellent environmental capability.
- Output enable function (OE) and stand-by function (ST) can be used for low current consumption applications.
- Pin compatible with full size and half size.



SG-8002DB Series



SG-8002DC Series



Item	Symbol	Specifications *2			Remarks
		PT/ST	PH/SH	PC/SC	
Output frequency range	F ₀	1.0000 MHz to 125.0000 Mhz			Refer to page 33. "Frequency range"
Max. supply voltage	VDD-GND	-0.5 V to +7.0 V			
Operating voltage	VDD	5.0 V ±0.5 V	3.3 ±0.3 V		2.7 V to 3.6 V: f ₀ ≤ 6.7 MHz (PC/SC)
Storage temperature	T _{STG}	-55 °C to +125 °C			Stored as bare product after unpacking
Operating temperature	T _{OPR}	-20 °C to +70 °C (-40 °C to +85 °C)	-40 °C to +85 °C		Refer to page 33. "Frequency range"
Frequency stability	Δf/f ₀	B: ±50 x 10 ⁻⁶ C: ±100 x 10 ⁻⁶ M: ±100 x 10 ⁻⁶			B, C: -20 °C to +70 °C, M: -40 °C to +85 °C
Current consumption	I _{OP}	45 mA Max.	28 mA Max.		No load condition, Max. frequency range
Output disable current	I _{OE}	30 mA Max.	16 mA Max.		OE=GND(PT, PH, PC)
Standby current	I _{ST}	50 μA Max.			ST=GND(ST, SH, SC)

Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	Input Current	Rise Fall time	Package	Funtion	Power Supply	Freq. Stability	Operating Temp. °C
14318	SG-8002DB-PCB-24M	EPSON	EPSON SG-8002 Programmable Oscillators	24	28mAmax.	4nS/4nS max.	SG-51(14P-DIP)	Output Enable	2.7~3.6V	50ppm	-20~+70
23796	SG-8002DC-PCB-16.9344	EPSON	EPSON SG-8002 Programmable Oscillators	16.9344	28mAmax.	4nS/4nS max.	SG-531(DIP-8P)	Output Enable	2.7~3.6V	50ppm	-20~+70
24371	SG-8002DC-PCB-24.576	EPSON	EPSON SG-8002 Programmable Oscillators	24.576	28mAmax.	4nS/4nS max.	SG-531(DIP-8P)	Output Enable	2.7~3.6V	50ppm	-20~+70
14319	SG-8002DC-PCB-24M	EPSON	EPSON SG-8002 Programmable Oscillators	24	28mAmax.	4nS/4nS max.	SG-531(DIP-8P)	Output Enable	2.7~3.6V	50ppm	-20~+70
30975	SG-8002DC-PCB-27M	EPSON	EPSON SG-8002 Programmable Oscillators	27	28mAmax.	4ns/4ns max.		Output Enable	2.7~3.6V	±50ppm	-20~+70
30977	SG-8002DC-PCB-36M	EPSON	EPSON SG-8002 Programmable Oscillators	36	28mAmax.	4nS/4nS max.		Output Enable	2.7~3.6V	±50ppm	-20~+70
27796	SG-8002DC-PCB-7.3608MHz	EPSON	EPSON SG-8002 Programmable Oscillators	7.3608MHz	28mAmax.	4nS/4nS max.	SG-531(DIP-8P)	Output Enable	2.7~3.6V	50ppm	-20~+70
27797	SG-8002DC-PCB-7.4184MHz	EPSON	EPSON SG-8002 Programmable Oscillators	7.4184MHz	28mAmax.	4nS/4nS max.	SG-531(DIP-8P)	Output Enable	2.7~3.6V	50ppm	-20~+70



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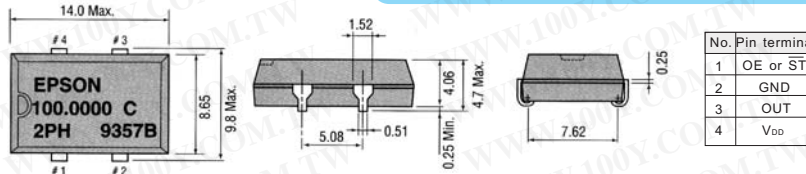
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Timing Function IC

EPSON_SG-8002 Programmable Oscillators

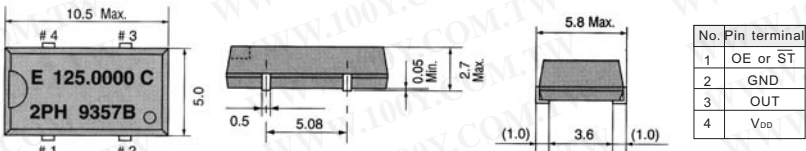
Detailed product specifications are available on: us.100y.com.tw



- Wide frequency output by PLL technology.
- Quick delivery of samples and short lead mass production time.
- Excellent environmental capability.
- Output enable function (OE) and stand-by function (ST) can be used for low current consumption applications.
- Package and pin compatible with SG-615

Item	Symbol	Specifications *2			Remarks
		PT/ST	PH/SH	PC/SC	
Output frequency range	F ₀	1.0000 MHz to 125.0000 Mhz			Refer to page 33. "Frequency range"
Max. supply voltage	V _{DD-GND}	-0.5 V to +7.0 V			
Operating voltage	V _{DD}	5.0 V ±0.5 V	3.3 ±0.3 V		2.7 V to 3.6 V; f ₀ ≤ 66.7 MHz (PC/SC)
Storage temperature	T _{STG}	-55 °C to +125 °C			Stored as bare product after unpacking
Operating temperature	T _{OPR}	-20 °C to +70 °C (-40 °C to +85 °C) -40 °C to +85 °C			Refer to page 33. "Frequency range"
Frequency stability	Δf/f ₀	B: ±50 x 10 ⁻⁶ ; C: ±100 x 10 ⁻⁶ ; M: ±100 x 10 ⁻⁶			B, C: -20 °C to +70 °C, M: -40 °C to +85 °C
Current consumption	I _{OP}	45 mA Max.		28 mA Max.	No load condition, Max. frequency range
Output disable current	I _{OE}	30 mA Max.		16 mA Max.	OE=GND(PT, PH, PC)
Standby current	I _{ST}	50 μA Max.			ST=GND(ST, SH, SC)

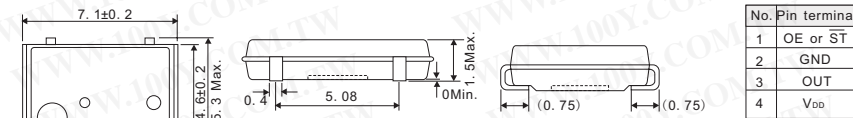
Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	Input Current	Rise Fall time	Package	Funtion	Power Supply	Freq. Stability	Operating Temp. °C
29858	SG-8002JA-PCB-1.2M	EPSON	EPSON SG-8002 Programmable Oscillators	1.2	28mAmax.	4nS/4nS max.	SG-614(SOJ-4P)	Output Enable	2.7~3.6V	50ppm	-20~+70
29859	SG-8002JA-PCB-1.6M	EPSON	EPSON SG-8002 Programmable Oscillators	1.6	28mAmax.	4nS/4nS max.	SG-614(SOJ-4P)	Output Enable	2.7~3.6V	50ppm	-20~+70
14293	SG-8002JA-PCB-125M	EPSON	EPSON SG-8002 Programmable Oscillators	125	28mAmax.	4nS/4nS max.	SG-614(SOJ-4P)	Output Enable	2.7~3.6V	50ppm	-20~+70
14320	SG-8002JA-PCB-24M	EPSON	EPSON SG-8002 Programmable Oscillators	24	28mAmax.	4nS/4nS max.	SG-614(SOJ-4P)	Output Enable	2.7~3.6V	50ppm	-20~+70



- Wide frequency output by PLL technology.
- Quick delivery of samples and short lead mass production time.
- Excellent environmental capability.
- Output enable function (OE) and stand-by function (ST) can be used for low current consumption applications.
- Package and pin compatible with SG-636

Item	Symbol	Specifications *2			Remarks
		PT/ST	PH/SH	PC/SC	
Output frequency range	F ₀	1.0000 MHz to 125.0000 Mhz			Refer to page 33. "Frequency range"
Max. supply voltage	V _{DD-GND}	-0.5 V to +7.0 V			
Operating voltage	V _{DD}	5.0 V ±0.5 V	3.3 ±0.3 V		2.7 V to 3.6 V; f ₀ ≤ 66.7 MHz (PC/SC)
Storage temperature	T _{STG}	-55 °C to +100 °C			Stored as bare product after unpacking
Operating temperature	T _{OPR}	-20 °C to +70 °C			Refer to page 33. "Frequency range"
Frequency stability	Δf/f ₀	B: ±50 x 10 ⁻⁶ ; C: ±100 x 10 ⁻⁶			-20 °C to +70 °C
Current consumption	I _{OP}	45 mA Max.		28 mA Max.	No load condition, Max. frequency range
Output disable current	I _{OE}	30 mA Max.		16 mA Max.	OE=GND(PT, PH, PC)
Standby current	I _{ST}	50 μA Max.			ST=GND(ST, SH, SC)

Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	Input Current	Rise Fall time	Package	Funtion	Power Supply	Freq. Stability	Operating Temp. °C
14296	SG-8002JC-PCB-125M	EPSON	EPSON SG-8002 Programmable Oscillators	125	28mAmax.	4nS/4nS max.	SG-636(SOJ-4P)	Output Enable	2.7~3.6V	50ppm	-20~+70
14321	SG-8002JC-PCB-24M	EPSON	EPSON SG-8002 Programmable Oscillators	24	28mAmax.	4nS/4nS max.	SG-636(SOJ-4P)	Output Enable	2.7~3.6V	50ppm	-20~+70
23514	SG-8002JC-PCB-5M	EPSON	EPSON SG-8002 Programmable Oscillators	5MHz	28mAmax.	4nS/4nS max.	SG-636(SOJ-4P)	Output Enable	5V	50ppm	-20~+70



- Wide frequency output by PLL technology.
- Quick delivery of samples and short lead mass production time.
- Excellent environmental capability.
- Output enable function (OE) and stand-by function (ST) can be used for low current consumption applications.
- Pin compatible with ceramic package crystal oscillator (7x5)

Item	Symbol	Specifications *2			Remarks
		PT/ST	PH/SH	PC/SC	
Output frequency range	F ₀	1.0000 MHz to 125.0000 Mhz			Refer to page 33. "Frequency range"
Max. supply voltage	V _{DD-GND}	-0.5 V to +7.0 V			
Operating voltage	V _{DD}	5.0 V ±0.5 V	3.3 ±0.3 V		2.7 V to 3.6 V; f ₀ ≤ 66.7 MHz (PC/SC)
Storage temperature	T _{STG}	-55 °C to +125 °C			Stored as bare product after unpacking
Operating temperature	T _{OPR}	-20 °C to +70 °C (-40 °C to +85 °C) -40 °C to +85 °C			Refer to page 33. "Frequency range"
Frequency stability	Δf/f ₀	B: ±50 x 10 ⁻⁶ ; C: ±100 x 10 ⁻⁶ ; M: ±100 x 10 ⁻⁶			B, C: -20 °C to +70 °C, M: -40 °C to +85 °C
Current consumption	I _{OP}	45 mA Max.		28 mA Max.	No load condition, Max. frequency range
Output disable current	I _{OE}	30 mA Max.		16 mA Max.	OE=GND(PT, PH, PC)
Standby current	I _{ST}	50 μA Max.			ST=GND(ST, SH, SC)

Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	Input Current	Rise Fall time	Package	Funtion	Power Supply	Freq. Stability	Operating Temp. °C
14322	SG-8002JF-PCB-24M	EPSON	EPSON SG-8002 Programmable Oscillators	24	28mAmax.	4nS/4nS max.	(SOJ-4P)	Output Enable	2.7~3.6V	50ppm	-20~+70



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Timing Function IC

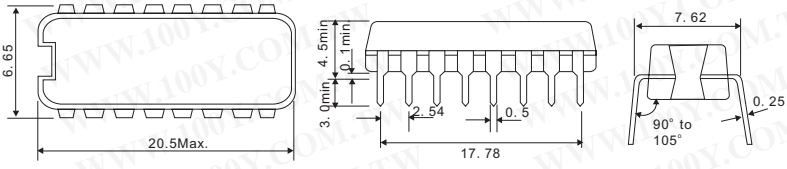
EPSON_SG-8002 Programmable Oscillators

Detailed product specifications are available on: us.100y.com.tw

Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	Input Current	Rise Fall time	Package	Funtion	Power Supply	Freq. Stability	Operating Temp. °C
24906	SG-8002JF-PCB-33MHz	EPSON	EPSON SG-8002 Programmable Oscillators	33	28mAmax.	4nS/4nS max.	(SOJ-4P)	Output Enable	5V	50ppm	-20~+70

EPSON_SPG series Oscillators

Detailed product specifications are available on: us.100y.com.tw



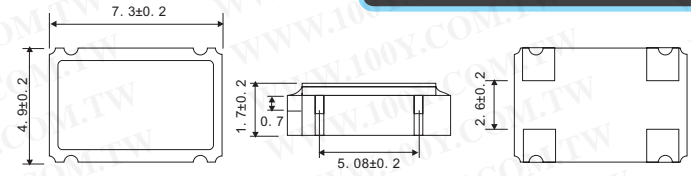
- Capable of selecting 57 varieties of frequency output
- Low current consumption
- Easy to mount DIP 16-pin package

Item	Symbol	Specifications	Remarks
Model name		8640BN	
Oscillation source frequency	f_0	1MHz	For ouput frequency, refer to the table in the next page
Max. supply voltage	V_{DD-GND}	-0.3V to +0.7V	
Operating voltage	V_{DD}	5.0V±0.5V	
Storage temperature	T_{STG}	-55°C to +125°C	Stored as bare product after unpacking
Operating temperature	T_{OPR}	-10°C to +70°C	
Frequency tolerance	$\Delta f/f_0$	±100x10 ⁻⁶	$V_{DD}=5V, T_a=+25°C$

Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	Input Current	Rise Fall t ime	Package	Power Supply	Operating Temp. °C
16957	SPG8640BN	EPSON	EPSON SPG Series 16 Pins Oscillators	1MHz	2.0mA max.	30/25ns	DIP-16P	-0.3~+7.0V	-10~+70

SMD Type Crystal Oscillators

Detailed product specifications are available on: us.100y.com.tw

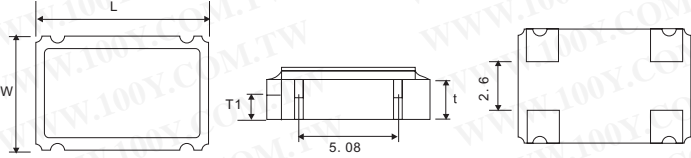


APPLICATIONS
PC, Peripherals, visual applications and other equipment

- FEATURES**
- Features a package size of 7.3x4.9x1.7 miniature SMD-SPXO
 - 3.3V operation high speed (0.5MHz to 120MHz)
 - $\Delta f/F_0 \pm 30 \times 10^{-6}$ version is designed for visual applications, available with fundamental frequencies of 28.636MHz, 28.375MHz and 14.318MHz

Item	Type	Legend	DSO751SV	Conditon
Output frequency range		F_0	0.5MHz~120MHz	
Frequency stability		$\Delta f/F_0$	±50x10 ⁻⁶ , ±100x10 ⁻⁶	-10~+70°C. Includes frequency tolerance at room temperature
Supply voltage		V_{DD}	+3.3V±0.3V	
Operating temperature range		T_{OPR}	-10°C~+70°C	

Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	Tol. ±ppm	Operating Volt.	Input Current	Rise Fall time	Package
28093	DSO751SV-25.000MHz	KDS	SMD-SPXO Crystal Oscillator	25.000MHz	±50 ppm	+3V+0.3V	25mA max.	10nsec. Max.	7.3*4.9*1.7
28106	DSO751SV-27.000MHz	KDS	SMD-SPXO Crystal Oscillator	27.000MHz		+3V+0.3V	25mA max.	10nsec. Max.	7.3*4.9*1.7
28129	DSO751SV-29.491MHz	KDS	SMD-SPXO Crystal Oscillator	29.491MHz		+3V+0.3V	25mA max.	10nsec. Max.	7.3*4.9*1.7
28092	DSO751SV-50.000MHz	KDS	SMD-SPXO Crystal Oscillator	50.000MHz		+3V+0.3V	25mA max.	10nsec. Max.	7.3*4.9*1.7



Type	L	W	t	T1
SR	7.0	5.0	1.4	0.55
SP	7.3	4.9	1.7	0.7

Unit: mm

- FEATURES**
- Tri-state function
 - For visual appllication, $\Delta f/F_0 \pm 30 \times 10^{-6}$ is available

ITEM	TYPE	HSO751S
Frequency range		1.8MHz~120MHz
Frequency stability		±25ppm, ±50ppm, ±100ppm
Option on pin1		pin 1 Have control
POWER Voltage		+2.85VDC, +3.3VDC, ±5V DC(±10%V)
Operating Temp		-10°C ~+70°C
Storage Temp		-55°C ~+125°C

Part No.	Product No.	Description	Frequency(MHz)	Tol. ±ppm	Operating Volt.	Input Current	Rise Fall time	Package
41238	HSO751S-25.000MHz	SMD-SPXO Crystal Oscillator	25.000MHz	+/- 50 ppm	3.3V	25mA max.	10ns Max.	7.3*4.9*1.7



T E L : Taiwan: 886-3-5753170
 F A X : Taiwan: 886-3-5753172
 E-mail: Taiwan: us_sale@100y.com.tw

Shenzhen: 86-755-83298787
 Shenzhen: 86-755-83640655
 Shenzhen: 100y@163.com

Shanghai: 86-21-54151736
 Shanghai: 86-21-64605107
 Shanghai: 100y-1@163.com

Timing Function IC

Crystals

Detailed product specifications are available on: us.100y.com.tw



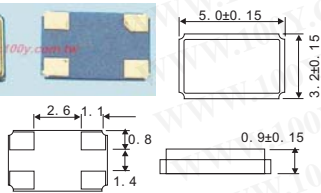
HC-49U/S

ITEM	Frequency range	Frequency tolerance (at 25 °C)	Tolerance Over	Operating temperature range	Shunt capacitance (Co)	Insulation resistance	Drive level	(CL)load capacitance	Aging(at 25°C)
SPECIFICATIONS	3.200MHZ to 70.000MHZ	±30ppm	±30ppm (standard)	-10°C to 60°C	7PF MAX	500MQ min at DC100V	1000uw Max	Customer assign	±5ppm/year Max

Part No.	Product No.	Manufacturer	Description	frequency (MHz)	Load capacitance (pF)	Can Style	±ppm
11750	XTAL-10.245M-U	TKD	Quartz Crystal Units	10.245	20pF	HC-49/U	30ppm
5730	XTAL-11.0592M-S	TKD	Quartz Crystal Units	11.0592	20pF	HC-49/S	30ppm
40445	XTAL-12.000M-S	QFT	Quartz Crystal Units	12.000	20pF	HC-49/S	30ppm
17123	XTAL-13.000M-S		Quartz Crystal Units	13.000	20pF	HC-49/S	30ppm
11112	XTAL-16.9344M-S	TKD	Quartz Crystal Units	16.9344MHz	20pF	HC-49/S	30ppm
13398	XTAL-18.432M-U	QFT	Quartz Crystal Units	18.432M	20PF	HC-49/U	30ppm
11748	XTAL-19.6608M-U		Quartz Crystal Units	19.6608	20pF	HC-49/U	30ppm
11746	XTAL-2.4576M-U	QFT	Quartz Crystal Units	2.4576	20pF	HC-49/U	30ppm
13471	XTAL-24.000M-S	TKD	Quartz Crystal Units	24.000	20pF	HC-49/S	30ppm
3208	XTAL-24.576M-S	TKD	Quartz Crystal Units	24.576	20pF	HC-49/S	30ppm
6986	XTAL-26.670M-U	QFT	Quartz Crystal Units	26.670	20pF	HC-49/U	30ppm
23569	XTAL-26.670M-U	TKD	Quartz Crystal Units	26.670	20pF	HC-49/U	30ppm
29253	XTAL-27.000M-U	QFT	QUARTZ CRYSTAL UNIT	27.000MHz	20pF	HC-49/U	+/-30ppm
6993	XTAL-27.125M-U	QFT	Quartz Crystal Units	27.125	20pF	HC-49/U	30ppm
23570	XTAL-28.432M-U	TKD	Quartz Crystal Unit	28.4320	20pF	HC-49/U	30ppm
23030	XTAL-3.000M-S	QFT	Quartz Crystal Units	3.000	20pF	HC-49/S	+/-30ppm
10253	XTAL-3.000M-U	QFT	Quartz Crystal Units	3.000MHz	20pF	HC-49/U	30ppm
10254	XTAL-3.2768M-U	QFT	Quartz Crystal Units	3.2768MHz	20pF	HC-49/U	30ppm
5726	XTAL-3.2768M-U		Quartz Crystal Units	3.2768MHz	20pF	HC-49/U	30ppm
3707	XTAL-3.57954M-S	TKD	Quartz Crystal Units	3.57954	20pF	HC-49/S	30ppm
10255	XTAL-30.000M-U	QFT	Quartz Crystal Units	30.000MHz	20pF	HC-49/U	30ppm
6963	XTAL-32.000M-S	TKD	Quartz Crystal Units	32.000	20pF	HC-49/S	30ppm
13348	XTAL-35.710M-U	QFT	Quartz Crystal Units	35.710MHz	20pF	HC-49/U	30ppm
14111	XTAL-4.000M-S	TKD	Quartz Crystal Units	4.000	20pF	HC-49/S	30ppm
11775	XTAL-4.032M-U	QFT	Quartz Crystal Units	4.032	20pF	HC-49/U	30ppm
11770	XTAL-4.433618M-U	QFT	Quartz Crystal Units	4.433618	20pF	HC-49/U	30ppm
11752	XTAL-4.608M-U	QFT	Quartz Crystal Units	4.608	20pF	HC-49/U	30ppm
7856	XTAL-40.000M-U	QFT	Quartz Crystal Units	40.000	20pF	HC-49/U	30ppm
11737	XTAL-42.000M-U		Quartz Crystal Units	42.000	20pF	HC-49/U	30ppm
22196	XTAL-45.000M/S		"KDS" Crystal	45MHz	20pF	HC-49U/S	30ppm
11738	XTAL-49.435M-U	QFT	Quartz Crystal Units	49.435	20pF	HC-49/U	30ppm
11768	XTAL-5.0688M-U	QFT	Quartz Crystal Units	5.0688	20pF	HC-49/U	30ppm
23063	XTAL-6.144M-S	QFT	Quartz Crystal Units	6.144	20pF	HC-49/S	+/-30ppm
9863	XTAL-6.144M-U		Quartz Crystal Units	6.144	20pF	HC-49/U	30ppm
7855	XTAL-6.144M-U	QFT	Quartz Crystal Units	6.144	20pF	HC-49/U	30ppm
11751	XTAL-7.200M-U	QFT	Quartz Crystal Units	7.200	20pF	HC-49/U	30ppm
6972	XTAL-7.200M-U		Quartz Crystal Units	7.200	20pF	HC-49/U	30ppm
11773	XTAL-7.3728M-U	QFT	Quartz Crystal Units	7.3728	20pF	HC-49/U	30ppm
11772	XTAL-9.429687M-U	QFT	Quartz Crystal Units	9.429687	20pF	HC-49/U	30ppm

SMD Crystals

Detailed product specifications are available on: us.100y.com.tw



Features

- Seam sealed crystal units.
- Ultra small SMD type crystal units.
- High precision characteristic covering up to high frequency range.
- Higher frequency stability and reliability.
- Excellent for reducing EMI effective.
- The best choice for Bluetooth, Wireless communication set,DSC,PDA.
- Lead-free parts.

Item	Type	7B / 5032	7B / 5032T
Frequency Range		12 ~ 100MHz	12 ~ 100MHz
Frequency Tolerance (at 25 °C)		±30 ppm or specify	±10 ppm
Frequency Stability Over Operating Temperature Range		±30 ppm or specify	±10 ppm
Operating Temperature Range		-10 ~ +70°C or specify	-40 ~ +85°C or specify
Shunt Capacitance (C0)		5pF Max. (2.0pF Typical)	5pF Max. (2.0pF Typical)
Driver Level		1 ~ 200 uW (10 uW typical)	1 ~ 100 uW (10 uW typical)
Load Capacitance		10pF, 16pF, 20pF or specify	6pF, 9pF,10pF,12pF,16pF
Aging		±3ppm per year Max.	±1ppm per year Max.
Storage Temperature Range		-55 ~ +125°C	-55 ~ +125°C

Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	Load capacitance(pF)	Can Style	±ppm
42761	7B12000091	TXC	TXC_SMD Quartz Crystal	12.000	12	5*3.2	20ppm
29129	7B16000140	TXC	TXC_SMD Quartz Crystal	16.000	12	5*3.2	20ppm
35597	7B16000195	TXC	TXC_SMD Quartz Crystal	16.000	20	5*3.2	30ppm



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 F A X : Taiwan: 886-3-5753172
 E-mail: Taiwan: us_sale@100y.com.tw

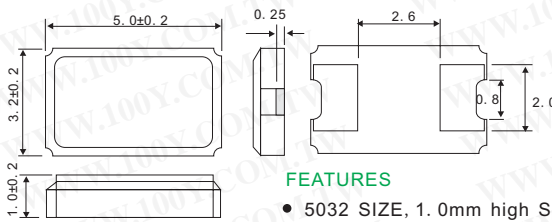
Shenzhen: 86-755-83298787
 Shenzhen: 86-755-83640655
 Shenzhen: 100y@163.com

Shanghai: 86-21-54151736
 Shanghai: 86-21-64605107
 Shanghai: 100y-1@163.com

Timing Function IC

SMD Crystals

Detailed product specifications are available on: us.100y.com.tw



Item	Type	DSX530GA			
Frequency range		7~9MHz	9~12MHz	12~40MHz	40~54MHz
Overtone order		Fundamental			
Load capacitance		Series, 8pF, 10pF, 12pF			
Drive Level		10µW (300µW max.)			
Frequency tolerance		±30x10 ⁻⁶ , ±50x10 ⁻⁶ , ±100x10 ⁻⁶ (at 25°C)			±50x10 ⁻⁶ , ±100x10 ⁻⁶ (at 25°C)
Series resistance		150Ω max.	100Ω max	50Ω max.	

FEATURES

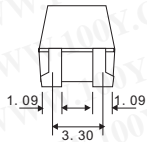
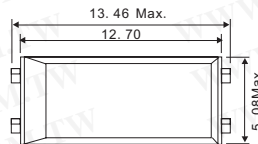
- 5032 SIZE, 1.0mm high SMD crystal resonator miniature and low profile
- Excellent heat resisting, High precision and high reliability
- Available from 7 to 54MHz
- Suitable for PDA, car navigation system, digital AV equipment and other equipment

Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	Load capacitance(pF)	Can Style
28535	DSX530GA-16.000MHz	KDS	SMD Type Crystal Resonator	16.000MHz	12pF	5*3.2*1.0mm



This kind of resonators is widely used in computers, facsimiles, TV, AV kind of equipment and instruments

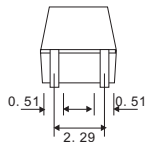
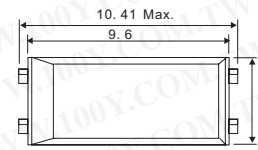
Part No.	Product No.	Description	Frequency(MHz)	Load capacitance(pF)	Can Style	±ppm
23339	ESB32.7680T20D35F	SMD Quartz Crystal Units	32.768MHz	20pF	HC-49/S-SMD	±30ppm



Item	Symbol	Specifications	Remarks
Nominal frequency	f	4.000 MHz to 29.999 Mhz *1 30.000 MHz to 64.000 Mhz *2	Fundamental mode 3rd overtone mode
Storage temperature	T _{STG}	-55 °C to +125 °C	Stored as bare product after unpacking
Operating temperature	T _{OPR}	-20 °C to +70 °C	Please contact us on availability of -40 °C to +85 °C
Maximum drive level	GL	2 mW Max.	Only crystal oscillation is guaranteed
Recommended drive level	DL	10 µW to 100 µW	
Frequency tolerance (standard)	Δf/f	±50 x10 ⁻⁶	Ta=+25 °C±3 °C
Frequency temperature characteristics(standard)		Under 5.5 MHz: ±50 x10 ⁻⁶ Over 5.5 MHz: ±30 x10 ⁻⁶	-20 °C to +70 °C For the out of standard specifications, please contact us for inquiries
Load capacitance	C _L	Fundamental: 10 pF to ∞ Over tone: 5 pF to ∞	Please specify
Series resistance	R ₁	As per table below	-20 °C to +70 °C, DL=100 µW
Shunt capacitance	C ₀	5 pF Max.	
Insulation resistance	IR	500 MΩMin.	
Aging	fa	±5 x10 ⁻⁵ /year	Ta=+25 °C ±3 °C, first year
Shock resistance	S.R.	±10 x10 ⁻⁶ Max.	Three drops on a hard board from 750 mm or excitation test with 29400 m/s ² x 0.3 ms x 1/2 sine wave x 3 directions

- Excellent heat-resistance and environment capability.
- Cover a wide frequency range, from 4 MHz to 64 Mhz.

Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	Load capacitance(pF)	Can Style	±ppm
11848	MA-506-32.000M	EPSON	SMD High-Frequency Crystal	32.000	20pF	MA-506	30ppm
11847	MA-506-4.194M	EPSON	SMD Quartz Crystal	4.194	18	MA-506	30ppm



Item	Symbol	Specifications	Remarks
Nominal frequency range	f	32.768 kHz 20.000 kHz to 165.000 kHz 307.2 kHz	
Storage temperature	T _{STG}	-55°C to +125°C	Stored as bare product after unpacking
Operating temperature	T _{OPR}	-40°C to +85°C	
Maximum drive level	GL	1.0µW max.	
Soldering condition	T _{SOL}	Twice at under 260°C within 10 sec. or under 230°C within 3 min.	
Frequency tolerance (standard)	Δf/f	±20ppm, ±50ppm ±50ppm, ±100ppm (307.2 kHz: ±100ppm)	Ta=25°C, DL=0.1µW
Turnover temperature (frequency)	OT	25°C ±5°C	
Temperature coefficient (frequency)	a	-0.04ppm/°C max.	
Load capacitance	C _L	6pF to ∞	Please specify
Series resistance	R ₁	50 kΩmax. 55kΩ to 6kΩ	For details, refer to 15
Motion capacitance	C ₁	2.0fF typ. 4.0fF to 0.6fF	
Shunt capacitance	C ₀	0.85pF typ. 2.0pF to 0.6pF	
Insulation resistance	IR	500 MΩ min.	
Aging	fa	±3ppm/year max. ±5ppm/year max.	Ta=25°C±3°C, first year
Shock resistance	S.R.	±5ppm max.	Three drops on a hard board from 75 cm or excitation test with 3000G x 0.3ms x 1/2 sine wave x 3 directions

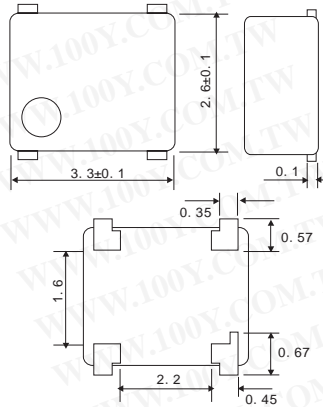
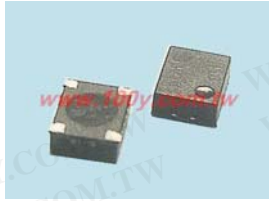
- High-density mounting-type SMD.
- Photolithography finished allows uniform, stable performance.
- Excellent shock resistance and environmental capability.
- Capable of covering low-frequency range from 20 kHz to 165 kHz.
- Suitable for time keeping of clock and microcomputer.

Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	Load capacitance(pF)	Can Style	±ppm
16913	MC-405-32.768K	SII(SEIKO)	SMD Quartz Crystal	32.768KHz	0.85	MC-405	30ppm



Timing Function IC

SMD Crystals



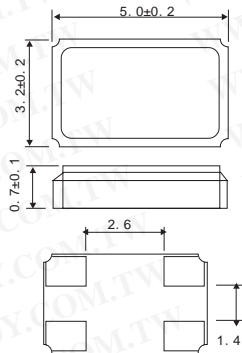
Detailed product specifications are available on: us.100y.com.tw

Item	Symbol	Specifications *2		Remarks
		PH / SH	PC / SC	
Output frequency range	F0	1.0 MHz to 80 MHz	—	VDD = 4.5 V to 5.5 V VDD = 3.0 V to 3.6 V
Max. supply voltage	VDD-GND	-0.5 V to +7.0 V		
Operating voltage	VDD	4.5 V to 5.5 V	2.7 V to 3.6 V	
Storage temperature	TSTG	-40 °C to +125 °C		Stored as bare product after unpacking
Operating temperature	TOPR	-20 °C to +70 °C (-40 °C to +85 °C)		
Frequency stability	Δf/f0	B: ±50 x 10 ⁻⁶ C: ±100 x 10 ⁻⁶		-20 °C to +70 °C
		M: ±100 x 10 ⁻⁶ *3		-40 °C to +85 °C
		L: ±50 x 10 ⁻⁶		-40 °C to +85 °C, VDD ±5%
Current consumption	Iop	35 mA Max.	—	No load (f0 = 80 MHz)
		—	28 mA Max.	No load (f0 = 125 MHz)
Output disable current	IOE	20 mA Max.	—	P type only (OE = GND, f0 = 80 MHz)
		—	16 mA Max.	P type only (OE = GND, f0 = 125 MHz)
Standby current	IST	50 μA Max.		S Type Only
Aging	fa	±5 x 10 ⁻⁶ / year Max.		Ta = +25 °C, First year
Shock resistance	S.R.	±20 x 10 ⁻⁶ Max.		Three drops on a hard board from 750 mm or excitation test with 29400 m/s ² x 0.3 ms x 1/2sine wave in 3 directions

- Using PLL technology and One time PROM programmability for quick-turn custom version.
- Reflowable and high density mounting type smallest SMD package(3.2 mm x 2.5 mm).
- Operable 3.3 V and 5.0 V.
- Output enable (OE : P type) or Standby (ST : S type) function allow more low current consumption.

- Available for lead (Pb)-free soldering.
- Complete lead (Pb)-free product.

Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	Load capacitance(pF)	Can Style	±ppm
23484	SG-8002LA5M-PHM	EPSON	HIGH-FREQUENCY CRYSTAL OSCILLATOR	1.0-80MHz	15Pf	4P/SOIC	+/-50ppm



Model	SX-5032	
Nominal Frequency Range	10.000-50.000MHz	
Standard Frequency	10.000, 11.000, 12.000, 25.000MHz	
Vibration Mode	Fundamental [AT]	
Frequency Tolerance (@ +25°C)	±10 ppm	
Freq. Temp. Characteristics (Ref. to 25°C)	±10 ppm	±15 ppm
Operating Temperature Range	-10°C~+60°C	
Storage Temperature Range	-40°C~+90°C	
Load Capacitance	Series, 10pF, 12pF, 16pF	
Shunt Capacitance	5pF Max.	
Drive Level	10μW(100μWMax.)	
Equivalent Series Resistance	See Table 1	
Aging (+25°C)	±1, ±3 ppm/year Max.	

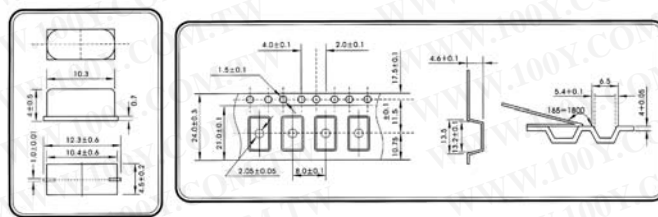
FEATURES

Ultra-thin, Ceramic SMD Package, Seam Sealed, Lead-free Design, Tight Tolerance and Stability, Reflow Soldering, Emboss Taping, RoHS Compliant Standard

TYPICAL APPLICATIONS

Cellular Telephones, PHS, Cordless Telephones and Pagers, WLAN, Bluetooth, Hand-Held Products

Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	Load capacitance(pF)	Can Style	±ppm
29155	SX-5032-16MHZ	SIWARD	SMD Quartz Crystal	16.000	12	5*3.2	20ppm



Capacitance range	3-30 Mhz	24-60 Mhz
Working temprature range	-20°C~+70°C	
Aging	<5ppm/year	
Load capacitance	12PF~∞	
Drive level	0.01mw~1mw	

This kind of resonators is widely used in computers, facsimiles, TV, AV kind of equipments and instruments

Part No.	Product No.	Description	Frequency(MHz)	Load capacitance(pF)	Can Style	±ppm
23328	XTAL-10.000M-49/SMD	SMD Quartz Crystal Units	10.000MHz	20pF	HC-49/S-SMD	50ppm
23336	XTAL-10.245M-49/SMD	SMD Quartz Crystal Units	10.245MHz	20pF	HC-49/S-SMD	50ppm
23329	XTAL-11.000M-49/SMD	SMD Quartz Crystal Units	11.000MHz	20pF	HC-49/S-SMD	50ppm
15729	XTAL-11.0592M-49/SMD	SMD Quartz Crystal Units	11.0592MHz	20pF	HC-49/S-SMD	+30ppm
23330	XTAL-15.000M-49/SMD	SMD Quartz Crystal Units	15.000MHz	20pF	HC-49/S-SMD	50ppm
23332	XTAL-16.9344M-49/SMD	SMD Quartz Crystal Units	16.9344MHz	20pF	HC-49/S-SMD	30ppm
23338	XTAL-18.432M-49/SMD	SMD Quartz Crystal Unit	18.432MHz	20pF	HC-49/S-SMD	50ppm
23334	XTAL-24.000M-49/SMD	SMD Quartz Crystal Units	24.000MHz	20pF	HC-49/S-SMD	±50PPM
15727	XTAL-3.579545M-49/SMD	SMD Quartz Crystal Unit	3.579545MHz	20pF	HC-49/S-SMD	30ppm
23324	XTAL-4.000M-49/SMD	SMD Quartz Crystal Units	4.000MHz	20pF	HC-49/S-SMD	+/-50PPM
23325	XTAL-4.096M-49/SMD	SMD Quartz Crystal Units	4.096MHz	20pF	HC-49/S-SMD	30ppm
23345	XTAL-4.915M-49/SMD	SMD Quartz Crystal Unit	4.915MHz	20pF	HC-49/S-SMD	30ppm
23337	XTAL-40.000M-49/SMD	SMD Quartz Crystal Units	40.000MHz	20pF	HC-49/S-SMD	50ppm
23326	XTAL-5.000M-49/SMD	SMD Quartz Crystal Units	5.000MHz	20pF	HC-49/S-SMD	30ppm



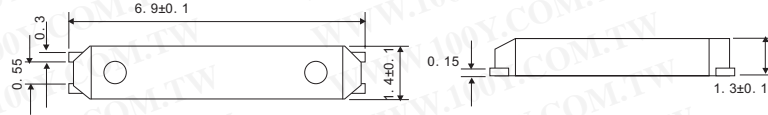
Timing Function IC

SMD Crystals



Features

- Plastic mold package incorporated tubular type quartz crystal.
- Suitable for automatic and high density surface mounting.
- Excellent shock and heat resistance.
- Multi dimension for choose.
- Reasonable cost.
- Contains high melting temperature type solder (Pb 85%) exempted by RoHS directive.

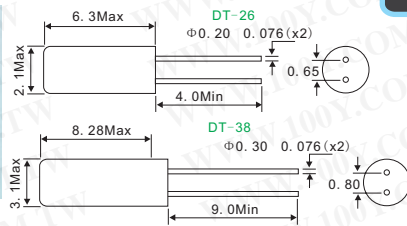


Detailed product specifications are available on: us.100y.com.tw

Item / Type	9HT2	9HT7
Nominal Frequency	32.768 KHz	
Frequency Tolerance (at 25 °C)	± 20 ppm	
Operating Temperature Range	-40 ~ +85 °C	
Shunt Capacitance (C0)	1 pF typical	0.8 pF typical
Motional Capacitance	2.1 fF typical	1.9 fF typical
Insulation Resistance	500 MΩ Min.	
Drive Level	1 μW Max.	
Load Capacitance	12.5 pF	
Peak Temperature (Frequency)	25 °C ± 5 °C	
Frequency-Temperature Coefficient	-4*10 ⁻⁸ / °C Max.	
Aging (at 25 °C)	± 3 ppm / year Max.	
Storage Temperature Range	-55 ~ +125 °C	

Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	Load capacitance(pF)	Can Style	±ppm
49781	XTAL32.768K/9H3812.5	TXC	SMD Quartz Crystal	32.768KHz	12.5 Pf	9HT7	± 20 ppm

Quartz Resonator



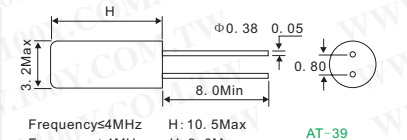
FEATURES

- Miniature package
- Low Cost
- Khz frequency
- Tight tolerance

Detailed product specifications are available on: us.100y.com.tw

Parameter	Symb	Condition	Min	Typ	Max	Units
Frequency range	Fo		30	32.768	100	Khz
Frequency Tolerance	ΔF / Fo	AT 25°C	±10	±20	±100	Ppm
Temperature Coefficient	K	REF TO 25°C			-0.042	ppm / (Δ°C) ²
Operating temperature range	T _{OPR}		-10		+60	°C
Storage temperature range	T _{STG}		-20		+70	°C
Shunt Capacitance	C ₀			0.85	2	pF
Motional capacitance	C ₁		1	2	4	fF
Load capacitance	CL		6	12.5	Series	pF
Insulation resistance	IR	100V _{DC}	500			MΩ
Drive level	DL				1	MW
Aging (first year)	F _a	AT25°C±3°C	-5.0		+5.0	ppm

Part No.	Product No.	Manufacturer	Description	Frequency (KHz)	Load capacitance(Pf)	Can Style	Equivalent resistance Ω	±ppm
39431	DA-32.768B060B		Quartz Resonator	32.768KHz	6pF	2.1*6.3mm		±20PPM
2080	DA32.768B125B		Quartz Resonator	32.768KHz	12.5pF	DT-26 2*6mm	50K	±20PPM
40625	DB100B125B		Quartz Resonator	100KHz	12.5pF	DT-38 ψ3*8mm	35k	±20PPM
41652	DB32.00B125B		Tuning Fork Crystal Resonator	32KHz	12.5pF	3*8mm	35KΩ	±20PPM
7884	DB32.768B125B		Quartz Resonator	32.768KHz	12.5pF	3*8mm		±20ppm
32417	DT26-32.768KHz-12.5pF	KDS	Quartz Resonator	32.768KHz	12.5pF	ψ2.1*6.3mm	≤ 40KΩ	±20PPM

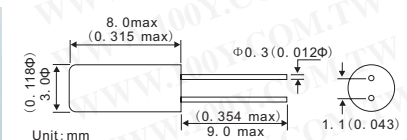


FEATURES

- Industry standard
- Low Cost
- Wide frequency range
- Small compact size

Parameter	Symb	Condition	Min	Typ	Max	Units
Frequency range	Fo		3.579545		70	Mhz
Frequency Tolerance	ΔF / Fo	AT 25°C	±20	±30	±50	ppm
Temperature Stability	TC	REF TO 25°C	±20	±30	±50	ppm
Operating temperature range	T _{OPR}		-10		+60	°C
Storage temperature range	T _{STG}		-40		+85	°C
Shunt Capacitance	C ₀				7	pF
Load capacitance	CL	Customer specified	10	16	Series	pF
Insulation resistance	IR	100V _{DC}	500			MΩ
Drive level	DL			100	500	μW
Aging (first year)	F _a	AT25°C	-5.0		+5.0	ppm

Part No.	Product No.	Description	Frequency (KHz)	Load capacitance(Pf)	Can Style	±ppm
41649	EAT-3.579545F20D33X	Quartz Resonator	3.579545MHz	20pF	3*10mm	±30PPM
11790	EAT-6.000F20D33X	Quartz Resonator	6.000MHZ	20pF	3*10mm	±30PPM
28736	EAT-9.6000F20D33X	High frequency miniature crystal unit	9.6000MHz	20pF	AT-39 3.2*10.5mm	±30ppm



- Micro tubular holder (cylindrical type) X-cut tuning fork crystals.
- Ideal for 1Hz timing frequency.
- Compact and high-shock.

Frequency:	32.768 kHz
Frequency Tolerance at 25°C:	±15 ppm; ±20 ppm (standard), ±30 ppm
Maximum Series Resistance:	35 k max.
Quality Factor (Q):	50,000 minimum
Motional Capacitance (C1):	0.0035 pf typical
Shunt Capacitance (Co):	1.60 pf typical
Capacitance Ratio (Co/C1):	460 typical
Load Capacitance (CL):	6 pF or 12.5pF
Drive Level:	1 μW max.
Operating Temperature Range:	-10°C to +60°C
Storage Temperature Range:	-30°C to +70°C
Shock:	3 ppm maximum 3 drops from a height of 75 cm onto hardwood
Vibration:	3 ppm maximum
Aging:	First year: 3 ppm maximum at 25°C

Part No.	Product No.	Manufacturer	Description	Frequency (KHz)	Load capacitance(Pf)	Can Style	Equivalent resistance Ω	±ppm
46710	T38G-32.768K-12.5	MEC	Tuning Fork Watch Crystals	32.768KHz	12.5pF	3*8mm	35KΩ	±20PPM



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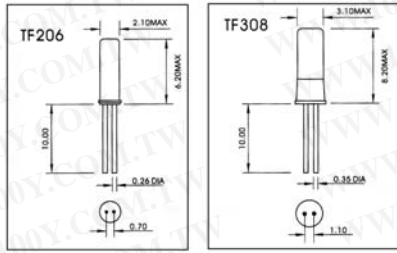
Timing Function IC

Quartz Resonator

Detailed product specifications are available on: us.100y.com.tw



This kind of turning fork crystal has small compact size, performance and economy, excellent shock and environmental characteristics, it is widely used in electronic clocks, kind of telephones, game systems.

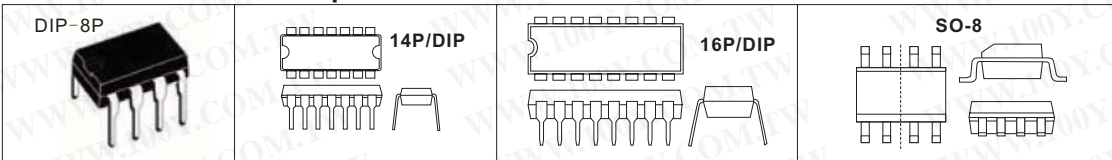


HOLDER TYPE		φ2X6	φ3X8
NOMINAL FREQUENCY	KHz	32.768	
FREQUENCY TOLERANCE	ppm	±20;±50;±100	
TURNOVER TEMPERATURE	°C	25±5	
LOAD CAPACITANCE	pF	12.5	
EQUIVALENT SERIES RESISTANCE (MAX)	KΩ	40;50;100	
DRIVE LEVEL (TYP)	μW	1.0	
SHUNT CAPACITANCE (TYP)	pF	1.3	1.6
AGING(FIRST YEAR MAX)	ppm	±5	
INSULATION RESISTANCE(MIN)	MΩ	500	
OPERATING TEMPERATURE RANGE	°C	-10~+60	
STORAGE TEMPERATURE RANGE	°C	-40~+85	

Part No.	Product No.	Manufacturer	Description	Frequency (KHz)	Load capacitance(Pf)	Can Style	Equivalent resistance Ω	±ppm
14196	TF206-32.768KHz	TKD	Quartz Resonator	32.768KHz	12.5pF	φ2*6mm	≅40KΩ	±20PPM
14112	TF308-32.768KHz	TKD	Quartz Resonator	32.768KHz	12.5pF	φ3*8mm	30KΩ	+~20PPM

Phase Lock Loop

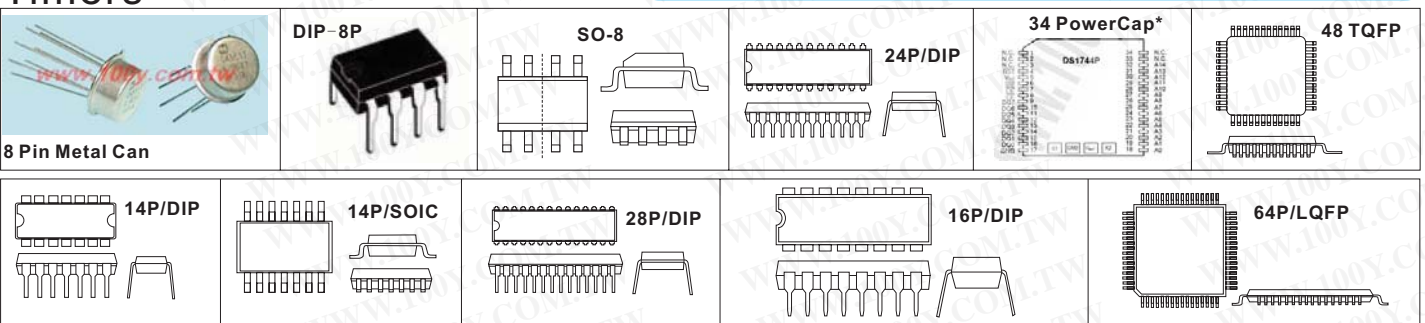
Detailed product specifications are available on: us.100y.com.tw



Part No.	Product No.	Manufacturer	Description	Pins/Package	TEMP RANGE(°C)	Vcc	GBP(Hz)	Icc(mA)
7725	CA1391E	HARRIS	TV Horizontal Processors (Phase-Locked Loop)	8P/DIP	0 to 85	40V(dc)	14734~16734Hz	40mA
13951	LM565CN	N.S	Phase locked loop	14P/DIP	0°C to +70°C	±12V	500KHz	8.0mA
16516	LM567CMX	N.S	Tone Decoder	8P/SOIC	-65°C to +150°C	5.0V	500KHz	7mA
6777	LM567CN	N.S	Tone Decoder/PLL;AM Lock Detection	8P/DIP	0 °C to +70 °C	10	500KHz	7mA
1378	LMC567CM	N.S	CMOS Tone Decoder	8P/SOIC	-25°C to +125°C	2~9V		
23964	MC145158P2	MOTOROLA	Serial-Input PLL Frequency Synthesizer	16P/DIP	-65~150°C	3~9V		+/-10mA
23857	NE564D		Phase-locked loop	16P/SOIC	0 to +70°C			60mA
1199	NE564N	PHILIPS	PHILIPS_PHASE-LOCKED LOOP	16P/DIP	0~+70°C	5V	50MHz	45mA
3830	NE564N-S	PHILIPS	PHILIPS_High frequency phase locked loop	16P/DIP	0~+70°C	5V	50MHz	45mA
29831	SE564N	PHILIPS	PHILIPS_Phase-locked loop	16P/DIP(Plastic)	-55~+125°C	5V	50MHz	45mA
40602	TLC556CN	T.I.	DUAL LinCMOSE TIMERS	14P/DIP	0 to +70°C	2V TO 18V		10mA~100mA

Timers

Detailed product specifications are available on: us.100y.com.tw



Part No.	Product No.	Manufacturer	Description	Pins/Package	Temp Range/°C	Vcc (Supply voltage)
22047	CA555T	HARRIS	Highly Stable Timer	8 Pin Metal Can	-55 to 125	4.5~18V
10256	DS0026CN	N.S	Dual High-Speed MOS Driver	8P/DIP	-65°C to +150°C	5.5V
41877	DS1100LU-40	MAXIM	3.3V 5-Tap Economy Timing Element Delay Line			
41902	DS1337S	MAXIM	I2C Serial Real-Time Clock	8P-SOP	-40°C to +85°C	1.8-5.5V
41923	DS1742-70	MAXIM	Y2KC Nonvolatile Timekeeping RAM	24 EDIP (0.740a)	0°C to +70°	5.0
41926	DS1742W-120	MAXIM	Y2KC Nonvolatile Timekeeping RAM	24 EDIP (0.740a)	0°C to +70°C	5.0
41929	DS1742W-150	MAXIM	Y2KC Nonvolatile Timekeeping RAM	24 EDIP (0.740a)	0°C to +70°C	3.3v
41931	DS1742W-150+	MAXIM	Y2KC Nonvolatile Timekeeping RAM	24 EDIP (0.740a)	0°C to +70°C	3.3V
41932	DS1744WP-120+	MAXIM	Y2K-Compliant, Nonvolatile Timekeeping RAMs	34 PowerCap*	0°C to +70°C	3.3 V
42006	DS2415P	DALLAS	Real-time clock with fully compatible 1-Wire® MicroLAN interface		-40°C to +85°C	2.5V to 5.5V
42018	DS26503L	DALLAS	T1/E1/J1 BITS Element	64 LQFP	0°C to +70°C	
42027	DS3150T	DALLAS	3.3V, DS3/E3/STS-1 Line Interface Unit	48 TQFP	0 C to +70 C	3.3V



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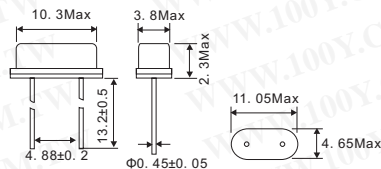
Timing Function IC

Timers

Detailed product specifications are available on: us.100y.com.tw

Part No.	Product No.	Manufacturer	Description	Pins/Package	Cross Ref.	Temp Range/°C	Vcc (Supply voltage)
4486	HA17555	HITACHI	Precision Timer-Pb Free	8P/DIP	MC1455P/NE555	-20 to +70	+18V
22619	ICM75561PA	HARRIS	General Purpose Timers	14P/PDIP		-25~85°C	18V
4485	LM555	HARRIS	Timer	8P/DIP	MC1455P/NE555/HA17555	0°C to +70°C	+18V
31826	LM556CM	N.S	Dual Timer	14P/SOIC		0°C to +70°C	+18V
4959	LM566N	N.S	Function Generator (VCO)	8P/DIP	NE566	0 to +70°C	±6V
22448	LM8560	UTC	DIGITAL ALARM CLOCK	28P/SDIP		30 ~70°C	-15~0.3V
7173	MM5369AA/N	N.S	Program. Oscillator/ divider (60Hz)	8P/DIP		0 to +70°C	3V-15V
46344	NE555D	ST(SGS)	Timer	8P/SOIC	MC1455P/LM555	0 to +70 °C	16V
4520	NE555DR	T.I.	Single Timer	8P/SOIC	(MC1455P/LM555CN)	-20 to +70	+18V
1195	NE555N	ST(SGS)	Timer	8P/DIP	MC1455P/LM555	0 to +70 °C	+16V
4484	NE555P	T.I.	Precision Timer	8P/DIP	MC1455P/LM555/HA17555	0°C to 70°C	18V
4953	NE556	N.S	Function Generator(GENERAL PURPOSE DUAL BIPOLAR TIMERS)	14P/DIP		0 to +70°C	+16V
1377	NE556D	N.S	Dual 555 timer(GENERAL PURPOSE DUAL BIPOLAR TIMERS)	14P/SOIC	MC3456	0 to +70°C	16V
19339	NE556N	ST(SGS)	GENERAL PURPOSE DUAL BIPOLAR TIMER	14P/DIP		0.005%	18V
4955	NE558	Fairchild	Quad Timer	16P/DIP	AN171	0 to +70°C	+16V
1196	TLC555CP	T.I.	CMOS Timer	8P/DIP	NE555	0°C to 70°C.	2 V to 15 V

SIWARD Crystal SIWARD Crystal LP-3.5 Series



TYPICAL APPLICATIONS

Computer clocks, Video cameras, HDD and Audio equipment

FEATURES

The LP series is a highly reliable resistance-weld sealing is adopted to assure high realization, designed according to the requirement of reducing the height.

Detailed product specifications are available on: us.100y.com.tw

Type	LP-3.5/LP-3.0/LP-2.5	
Nominal frequency range	3.5~26MHz	26~80MHz
Vibration Mode	Fundamental	3rd overtone
Frequency tolerance (at+250°C)	±50 x 10 ⁻⁶	
Freq. temperature characteristics	±50 x 10 ⁻⁶	
Operating temperature range	-10°C~+70°C (-40°C~+85°C)	
Load capacitance	Series, 10pF, 12pF, 16pF	
Shunt capacitance	5pF MAX.	
Level of drive	10µW (100µW MAX)	
Storage temperature range	-40°C~+90°C	

Part No.	Product No.	Manufacturer	Description	Frequency (MHz)	±ppm	Load capacitance (pF)	Can Style
6965	LP-3.5.2S-10.0000MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	10.000	30ppm	20pF	HC-49/S
6980	LP-3.5.2S-10.240MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	10.240	30ppm	20pF	HC-49/S
23347	LP-3.5.2S-11.000MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	11.000	30ppm	20pF	HC-49/S
39049	LP-3.5.2S-11.0592MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	11.0592	30ppm	20pF	HC-49/S
13397	LP-3.5.2S-12.000MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	12.000	30ppm	20pF	HC-49/S
11325	LP-3.5.2S-14.000MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	14.000	30ppm	20pF	HC-49/S
6970	LP-3.5.2S-14.31818MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	14.31818	30ppm	20pF	HC-49/S
4518	LP-3.5.2S-14.7456MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	14.7456	30ppm	20pF	HC-49/S
10950	LP-3.5.2S-15.000MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	15.000	30ppm	20pF	HC-49/S
13399	LP-3.5.2S-16.000MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	16.000	±30ppm		HC-49/S
23180	LP-3.5.2S-16.9344MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	16.9344	30ppm	20pF	HC-49/S
39050	LP-3.5.2S-17.734475MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	17.734475	30ppm	20pF	HC-49/S
23067	LP-3.5.2S-18.432MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	18.432	30ppm	20pF	HC-49/S
22991	LP-3.5.2S-2.000MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	2.000	+/-30ppm	20pF	HC-49/S
23029	LP-3.5.2S-2.4576MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	2.4576	30ppm	20pF	HC-49/S
13396	LP-3.5.2S-20.000MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	20.000	±30ppm	20pF	Crystal DIP
12716	LP-3.5.2S-22.1184MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	22.1184MHz	30ppm	20pF	HC-49/S
39048	LP-3.5.2S-24.000MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	24.000	30ppm	20pF	HC-49/S
39352	LP-3.5.2S-24.576MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	24.576	30ppm	20pF	HC-49/S
32216	LP-3.5.2S-25.000MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	25.000	30ppm	20pF	HC-49/S
23070	LP-3.5.2S-26.670MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	26.670	30ppm	20pF	HC-49/S
23199	LP-3.5.2S-27.000MHz-11.5PF	SIWARD	SIWARD_Quartz Crystal Unit	27.000MHz	+/-30ppm	11.5pF	HC-49/S
23071	LP-3.5.2S-27.125MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	27.125	30ppm	20pF	HC-49/S
6992	LP-3.5.2S-28.636MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	28.636	30ppm	20pF	HC-49/S
23031	LP-3.5.2S-3.2768MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	3.2768	30ppm	20pF	HC-49/S
13476	LP-3.5.2S-3.579545MHz-16PF	SIWARD	SIWARD_Quartz Crystal Unit	3.579545	30ppm	20pF	HC-49/S
6977	LP-3.5.2S-3.6864MHz-18PF	SIWARD	SIWARD_Quartz Crystal Unit	3.6864	30ppm	18pF	HC-49/S
23072	LP-3.5.2S-30.000MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	30.000	30ppm	20pF	HC-49/S
23179	LP-3.5.2S-32.000MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	32.000	±30ppm	20pF	Crystal DIP
10252	LP-3.5.2S-32.768MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	32.768MHz	±30ppm	20pF	HC-49/S
23211	LP-3.5.2S-4.000MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	4.000MHz	±30ppm	20pF	HC-49/S
23032	LP-3.5.2S-4.032MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	4.032	±30ppm	20pF	HC-49/S
6979	LP-3.5.2S-4.096MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	4.0960	±30ppm	20pF	HC-49/S
11771	LP-3.5.2S-4.194304MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	4.194304	30ppm	20pF	HC-49/S
23047	LP-3.5.2S-4.608MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	4.608	±30ppm	20pF	HC-49/S
6975	LP-3.5.2S-4.9152MHz-20PF	SIWARD	SIWARD_Quartz Crystal Unit	4.9152	±30ppm	20pF	HC-49/S



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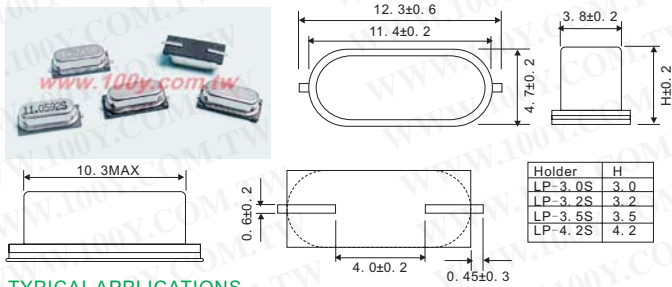
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Timing Function IC

SIWARD Crystal LP-3.5 Series

Detailed product specifications are available on: us.100y.com.tw

Part No.	Product No.	Manufacturer	Description	Frequency (MHz)	±ppm	Load capacitance (pF)	Can Style
19775	LP-3.5.2S-40.000MHz-30PF	SIWARD	SIWARD_ Quartz Crystal Unit	40.000	±30ppm	30pF	Crystal DIP
39051	LP-3.5.2S-48.000MHz-20PF	SIWARD	SIWARD_ Quartz Crystal Unit	48.000	30ppm	20pF	HC-49/S
31676	LP-3.5.2S-49.152MHz-20PF	SIWARD	SIWARD_ Quartz Crystal Unit	49.152	30ppm	20pF	Crystal DIP
6976	LP-3.5.2S-5.000MHz-20PF	SIWARD	SIWARD_ Quartz Crystal Unit	5.0000	30ppm	20pF	HC-49/S
9862	LP-3.5.2S-6.000MHz-20PF	SIWARD	SIWARD_ Quartz Crystal Unit	6.0000	30ppm	20pF	HC-49/S
23065	LP-3.5.2S-7.200MHz-20PF	SIWARD	SIWARD_ Quartz Crystal Unit	7.200	30ppm	20pF	HC-49/S
11774	LP-3.5.2S-7.3728MHz-20PF	SIWARD	SIWARD_ Quartz Crystal Unit	7.3728	30ppm	20pF	HC-49/S
14113	LP-3.5.2S-8.000MHz-30PF	SIWARD	SIWARD_ Quartz Crystal Unit	8.0000	30ppm	30pF	HC-49/S
6962	LP-3.5.2S-9.8304MHz-20PF	SIWARD	SIWARD_ Quartz Crystal Unit	9.8304	30ppm	20pF	HC-49/S



Type	LP-3.5/LP-3.0/LP-2.5	
Nominal frequency range	3.5~50MHz	26~80MHz
Vibration Mode	Fundamental	3rd overtone
Frequency tolerance (@+25°C)	±50 ppm	
Freq. temperature characteristics	±50 ppm	
Operating temperature range	-10°C~+70°C (-40°C~+85°C)	
Load capacitance	Series, 10pF, 12pF, 16pF	
Shunt capacitance	5pF MAX.	
Level of drive	10µW (100µW MAX)	
Storage temperature range	-40°C~+90°C	

TYPICAL APPLICATIONS

Microprocessor Clock, Network Card, Cable Modems, ADSL, ISDN, Remote Control Device, Network Processor, A/V Card, Security System

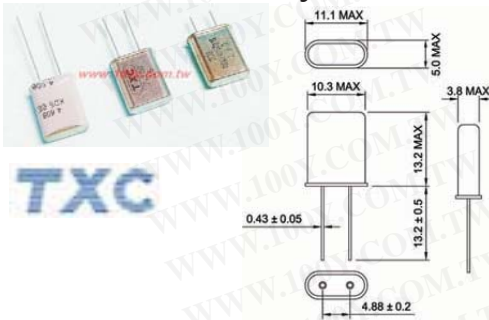
FEATURES

Metal Package, Resistance Sealed, SMD Lower Height Design, Lead-free, Tight Tolerance and Stability, RoHS Compliant Standard

Part No.	Product No.	Manufacturer	Description	Frequency (MHz)	±ppm	Load capacitance (pF)	Can Style
30484	LP-4.2S-11.0592MHz	SIWARD	SMD Quartz Crystal Units	11.0592MHz	±50ppm	5pF Max.	49/SMD

TXC Crystal TXC HC-49 Crystal

Detailed product specifications are available on: us.100y.com.tw

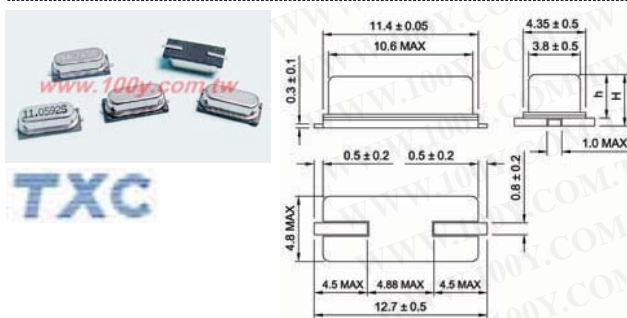


Item / Type	9A
Frequency Range	1.843 ~ 200 Mhz
Frequency Tolerance (at 25 °C)	± 30 ppm, or specify
Frequency Stability Over Operating Temperature Range	± 30 ppm, or specify
Operating Temperature Range	-20 ~ +70 °C, or specify
Shunt Capacitance (C0)	7 pF Max.
Drive Level	1 ~ 1000 uW (100 uW typical)
Load Capacitance	Series, 16 pF, 20 pF, 30 pF, 32 pF, or specify
Aging (at 25 °C)	± 3 ppm / year Max.
Storage Temperature Range	-40 ~ +85 °C

Features

- Resistance welded type crystal units.
- High frequency stability and reliability.
- A great number of standard frequencies and wide frequency range.
- Higher frequency pullability and lower equivalent series resistance.
- Lower cost and highly mass production capacity.
- The best choice of TV, STB, LCDM, and Cable Modem..

Part No.	Product No.	Manufacturer	Description	Frequency (MHz)	±ppm	Load capacitance (pF)	Can Style
23152	XTAL-1.8432M-U	TXC	QUARTZ CRYSTAL UNITS	1.8432MHz	+/-30ppm	32pF	HC-49/U
23175	XTAL-10.000M-U	TXC	QUARTZ CRYSTAL UNIT	10.000MHz	+/-30ppm	32pF	HC-49/U
7834	XTAL-11.98135M-U	TXC	Quartz Crystal	11.98135	±30ppm	20pF	HC-49U
35973	XTAL-2.000M-U	TXC	Quartz Crystal Units	2.000	±30ppm		HC-49/U



Item / Type	9C
Frequency Range	3.2 ~ 70 Mhz
Frequency Tolerance (at 25 °C)	± 30 ppm, or specify
Frequency Stability Over Operating Temperature Range	± 30 ppm, or specify
Operating Temperature Range	-10 ~ +60 °C, or specify
Shunt Capacitance (C0)	7 pF Max.
Drive Level	1 ~ 500 µW (100 µW typical)
Load Capacitance	Series, 16 pF, 20 pF, 30 pF, 32 pF, or specify
Aging (at 25 °C)	± 3 ppm / year Max.
Storage Temperature Range	-40 ~ +85 °C

Features

- Surface mount type crystal units.
- 2 types (S2: 3.0mm & S3: 3.8mm height) can be applied by customer.
- A great number of standard frequencies.
- High frequency pullability and low equivalent series resistance.
- Highly mass production capability.
- The best choice of PC, STB, LCDM, and Cable Modem.

Part No.	Product No.	Manufacturer	Description	Frequency (MHz)	±ppm	Load capacitance (pF)	Can Style
23176	XTAL-10.000M-49/SMD	TXC	QUARTZ CRYSTAL UNIT	10.000MHz	+/-30ppm	32pF	HC-49/SMD



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 Shenzhen: 86-755-83640655
 Shenzhen: 100y@163.com

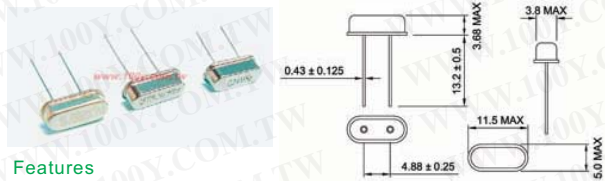
Shanghai: 86-21-54151736
 Shanghai: 86-21-64605107
 Shanghai: 100y-1@163.com

Timing Function IC

TXC HC-49 Crystal

Detailed product specifications are available on: us.100y.com.tw

Part No.	Product No.	Manufacturer	Description	Frequency (MHz)	±ppm	Load capacitance (pF)	Can Style
23181	XTAL-13.500M-49/SMD	TXC	QUARTZ CRYSTAL UNIT	13.500MHz	+/-30ppm	18pF	HC-49/SMD
23182	XTAL-13.824M-49/SMD	TXC	QUARTZ CRYSTAL UNIT	13.824MHz	+/-30ppm	20pF	HC-49/SMD
23183	XTAL-14.31818M-49/SMD	TXC	QUARTZ CRYSTAL UNIT	14.31818MHz	+/-30ppm		HC-49/SMD
23186	XTAL-14.318M-49/SMD	TXC	QUARTZ CRYSTAL UNIT	14.318MHz	+/-30ppm	16pF	HC-49/SMD
23189	XTAL-20.000M-49/SMD	TXC	QUARTZ CRYSTAL UNIT	20.000MHz	+/-30ppm	18pF	HC-49/SMD
23195	XTAL-24.000M-49/SMD	TXC	QUARTZ CRYSTAL UNIT	24.000MHz	+/-30ppm	20pF	HC-49/SMD
23194	XTAL-24.576M-49/SMD	TXC	QUARTZ CRYSTAL UNIT	24.576MHz	+/-30ppm	16pF	HC-49/SMD
23197	XTAL-25.000M-SMD	TXC	QUARTZ CRYSTAL	25.000MHz	+/-30ppm	20pF	HC-49/SMD
23200	XTAL-27.000M-49/SMD	TXC	QUARTZ CRYSTAL UNIT	27.000MHz	+/-30ppm	20pF	HC-49/SMD
23203	XTAL-28.636M-49S/SMD	TXC	QUARTZ CRYSTAL UNIT	28.636MHz	+/-30ppm	30pF	HC-49S/SMD
23206	XTAL-30.000M-49/SMD	TXC	QUARTZ CRYSTAL UNIT	30.000MHz	+/-30ppm	20pF	HC-49/SMD
23213	XTAL-4.000M-49/SMD	TXC	QUARTZ CRYSTAL UNIT	4.000MHz	+/-30ppm	20pF	HC-49/SMD
18822	XTAL-4.433618M-49/SMD	TXC	SMD Quartz Crystal	4.433618MHz	30ppm	20pF	HC-49/SMD
23215	XTAL-6.000M-49/SMD	TXC	QUARTZ CRYSTAL UNIT	6.000MHz	+/-30ppm	20pF	HC-49/SMD



Features

- Resistance welded type crystal units.
- A great number of standard frequencies .
- High frequency pullability and low equivalent series resistance.
- Lower cost and highly mass production capacity.
- The best choice of PC, STB, LCDM, and Cable Modem.

Item / Type	9B
Frequency Range	3.2 ~ 90 Mhz
Frequency Tolerance (at 25 °C)	± 30 ppm, or specify
Frequency Stability Over Operating Temperature Range	± 30 ppm, or specify
Operating Temperature Range	-10 ~ +60 °C, or specify
Shunt Capacitance (C0)	7 pF Max.
Drive Level	1 ~ 500 µW (100 µW typical)
Load Capacitance	Series, 16 pF, 20 pF, 30 pF, 32 pF, or specify
Aging (at 25 °C)	± 3 ppm / year Max.
Storage Temperature Range	-40 ~ +85 °C

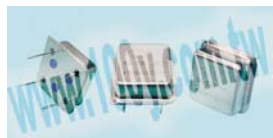
Part No.	Product No.	Manufacturer	Description	Frequency (MHz)	±ppm	Load capacitance (pF)	Can Style
23177	XTAL-11.0592M-S	TXC	QUARTZ CRYSTAL UNIT	11.0592MHz	+/-30ppm	32pF	HC-49/S
23178	XTAL-11.98132M-S	TXC	QUARTZ CRYSTAL	11.98132MHz	+/-30ppm		HC-49/S
3714	XTAL-12.000M-S	TXC	Quartz Crystal Units	12.000	30ppm	20pF	HC-49/S
23185	XTAL-14.318M-S	TXC	QUARTZ CRYSTAL UNIT	14.318MHz	+/-30ppm	20pF	HC-49/S
6971	XTAL-16.000M-S	TXC	Quartz Crystal	16.000	±30ppm	20pF	HC-49/S
23187	XTAL-17.734475M-S	TXC	QUARTZ CRYSTAL UNIT	17.734475MHz	+/-30ppm		HC-49/S
23188	XTAL-20.250M-S	TXC	QUARTZ CRYSTAL UNIT	20.250MHz	+/-30ppm	13pF	HC-49/S
23190	XTAL-21.000M-S	TXC	QUARTZ CRYSTAL UNIT	21.000MHz	+/-30ppm		HC-49/S
21387	XTAL-22.1184M-S	TXC	Quartz Crystal	22.1184MHz	±30ppm	20pF	HC-49/S
23192	XTAL-24.1678M-S	TXC	QUARTZ CRYSTAL UNIT	24.1678MHz	+/-30ppm	20pF	HC-49/S
23193	XTAL-24.576M-S	TXC	QUARTZ CRYSTAL UNIT	24.576MHz	+/-30ppm	35pF	HC-49/S
23196	XTAL-25.000M-S	TXC	QUARTZ CRYSTAL	25.000MHz	+/-30ppm	20pF	HC-49/S
23198	XTAL-27.000M-S	TXC	QUARTZ CRYSTAL UNIT	27.000MHz	+/-30ppm	20pF	HC-49/S
23201	XTAL-28.224M-S	TXC	QUARTZ CRYSTAL UNIT	28.224MHz	+/-30ppm	18pF	HC-49/S
23202	XTAL-28.63636M-S	TXC	QUARTZ CRYSTAL UNIT	28.63636MHz	+/-30ppm	20pF	HC-49/S
23205	XTAL-30.000M-S	TXC	QUARTZ CRYSTAL UNIT	30.000MHz	+/-30ppm	30pF	HC-49/S
23207	XTAL-33.000M-S	TXC	QUARTZ CRYSTAL UNIT	33.000MHz	+/-30ppm		HC-49/S
6978	XTAL-4.000M-S	TXC	Quartz Crystal Unit	4.000	30ppm	20pF	HC-49/S
23209	XTAL-48.000M-S	TXC	QUARTZ CRYSTAL UNIT	48.000MHz	+/-30ppm	20pF	HC-49/S
23214	XTAL-6.000M-S	TXC	QUARTZ CRYSTAL	6.000MHz	+/-30ppm	20pF	HC-49/S
9861	XTAL-8.000M-S	TXC	Quartz Crystal	8.000	±30ppm	20pF	HC-49/S
23219	XTAL-9.600M-S	TXC	QUARTZ CRYSTAL UNIT	9.600MHz	+/-30ppm	20pF	HC-49/S

TXC Clock Oscillator

FEATURES

- All metal welded package
- Wide frequency range from 1.0MHz up to 130MHz
- CMOS IC circuit construction built-in with tri-state function
- CMOS/TTL compatible in general application
- Supply voltage: 3.3v to 5v

Detailed product specifications are available on: us.100y.com.tw



Item	Type	6K (Full size)		6M (Half size)	
		TTL/CMOS	CMOS	TTL/CMOS	CMOS
Fan out type		TTL/CMOS	CMOS	TTL/CMOS	CMOS
Supply voltage		5.0V	3.3V	5.0V	3.3V
Frequency range		1~130MHz			
Frequency stability (25oC)		±20ppm,±25ppm,±50ppm,±100ppm,or specify			
Operating temperature		0~+70°C	-20~+70°C	-40~+85°C	
Storage temperature range		-55~+125°C			

Part No.	Product No.	Manufacturer	Description	Frequency (MHz)	Tol. ±ppm	Operating Volt.	Input Current	Rise Fall time	Package
6917	OSC1.8432M-HALF	TXC	O.S.C (Half Can) 8 Pins Crystal Clock Oscillators	1.8432	25ppm	5V	10mA	5ns Max	HALF CAN
22780	OSC100.000M-HALF	TXC	O.S.C (Half Can) Crystal Clock	100MHz	25ppm	3.3or5V		5ns Max	HALF CAN
6913	OSC14.3181M-HALF	TXC	O.S.C (Half Can) 8 Pins Crystal Clock Oscillators	14.3181	25ppm	5V	20mA	5ns Max	HALF CAN
6953	OSC2.0000M-FULL	TXC	14 Pins TTL Crystal Clock Oscillators	2.0000	±50ppm	5V	30mA	15ns max	FULL CAN
6918	OSC2.4576M-HALF	TXC	O.S.C (Half Can) Crystal Clock Oscillator	2.4576	±25ppm	5V	10mA	5ns Max	HALF CAN
648	OSC22.118M-HALF	TXC	O.S.C (Half Can) Crystal Clock Oscillator	22.118MHz	25ppm	5V	15mA	5ns max.	HALF CAN
6919	OSC24.000M-HALF	TXC	O.S.C (Half Can) 8 Pins Crystal Clock Oscillators	24.000	25ppm	5V	20mA	5ns Max	HALF CAN



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Shanghai: 86-21-64605107
Shanghai: 100y-1@163.com

Timing Function IC

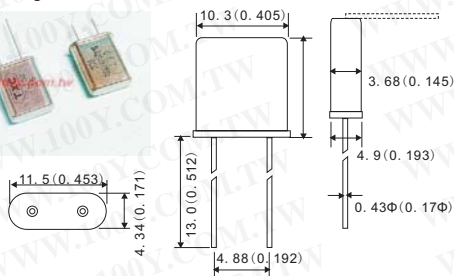
TXC Clock Oscillator

Detailed product specifications are available on: us.100y.com.tw

Part No.	Product No.	Manufacturer	Description	Frequency (MHz)	Tol. \pm ppm	Operating Volt.	Input Current	Rise Fall time	Package
22781	OSC25.000M-HALF533	TXC	O.S.C (Half Can) Crystal Clock	25.000MHz	50ppm	3.3V		5ns Max	HALF CAN
22782	OSC27.000M-HALF505	TXC	O.S.C (Half Can) Crystal Clock	27.000MHz	50ppm	5V		5ns Max	HALF CAN
22783	OSC27M-HALF533	TXC	O.S.C (Half Can) Crystal Clock	27.000MHz	50ppm	3.3V		5ns Max	HALF CAN
3209	OSC28.322M-HALF	TXC	O.S.C (Half Can) Crystal Clock Oscillators	28.322MHz	25ppm	5V	15mA	5ns	HALF CAN
22784	OSC28.636M-HALF	TXC	O.S.C (Half Can) Crystal Clock	28.636MHz	25ppm	3.3or5V		5ns Max	HALF CAN
646	OSC3.6864M-HALF	TXC	O.S.C (Half Can) 8 Pins Crystal Clock Oscillators	3.6864MHz	25ppm	5V	20mA	5ns Max	HALF CAN
6915	OSC32.000M-HALF	TXC	O.S.C (Half Can) Crystal Clock Oscillator	32.000	25ppm	5V	30mA	5ns Max	HALF CAN
651	OSC33.000M-HALF	TXC	O.S.C (Half Can) 8 Pins Crystal Clock Oscillators	33.000	25ppm	5V	30mA	5ns Max	HALF CAN
22786	OSC33.000M-HALF505	TXC	O.S.C (Half Can) Crystal Clock	33.000MHz	50ppm	5V		5ns Max	HALF CAN
22787	OSC33.000M-HALF535	TXC	O.S.C (Half Can) Crystal Clock	33.000MHz	50ppm	3.3or5V		5ns Max	HALF CAN
7556	OSC4.000M-HALF	TXC	O.S.C (Half Can) Crystal Clock Oscillator	4.000MHz	25ppm	5V	10mA	5ns	HALF CAN
22789	OSC40.000M-HALF535	TXC	O.S.C (Half Can) Crystal Clock	40.000MHz	50ppm	3.3or5V		5ns Max	HALF CAN
22788	OSC40.500M-HALF500	TXC	O.S.C (Half Can) Crystal Clock	40.500MHz	50ppm	3.3or5V		5ns Max	HALF CAN
22790	OSC48.000M-HALF500	TXC	O.S.C (Half Can) Crystal Clock	48.000MHz	50ppm	3.3or5V		5ns Max	HALF CAN
22791	OSC49.152M-HALF500	TXC	O.S.C (Half Can) Crystal Clock	49.152MHz	50ppm	3.3or5V		5ns Max	HALF CAN
22792	OSC50.000M-HALF505	TXC	O.S.C (Half Can) Crystal Clock	50.000MHz	50ppm	5V		5ns Max	HALF CAN
22793	OSC75.000M-HALF855	TXC	O.S.C (Half Can) Crystal Clock	75.000MHz	25ppm	5V		5ns Max	HALF CAN
6927	OSC80.000M-FULL	TXC	14 Pins TTL Crystal Clock Oscillators	80.000	25ppm	5V	50mA	5ns	FULL CAN
22794	OSC83.000M-HALF833	TXC	O.S.C (Half Can) 8 Pins Crystal Clock	83.000MHz	25ppm	3.3V		5ns Max	HALF CAN
6956	OSC9.600M-HALF	TXC	14 Pins TTL Crystal Clock Oscillators	9.600MHz	25ppm	5V	50mA	10ns	HALF CAN

MEC Crystal Products MEC_Crystal M49,M49L,HC-49 Series

Detailed product specifications are available on: us.100y.com.tw



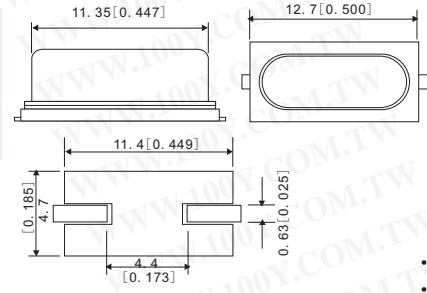
Crystal Holder Prefix	Thru-hole types:	
	H49, H50: Straight wire leads	H49T: Straight wire leads
Mode of Oscillation	See E.S.R. table below	
Frequency Tolerance at +25°C	SL-cut: ± 50 ppm ($\pm 0.005\%$) at 25°C; AT-cut: ± 30 ppm ($\pm 0.003\%$) at 25°C Tolerance as tight as ± 3 ppm is also available.	
Frequency Stability	SL-cut: ± 100 ppm ($\pm 0.01\%$) over -10 to +60°C AT-cut: ± 50 ppm ($\pm 0.005\%$) over -10 to +60°C. Stability as tight as ± 3 ppm over 0 to +50°C or ± 7 ppm over -20 to +70°C is also available.	
Shunt Capacitance (Co)	7 pF maximum	
Load Capacitance (CL)	Series (spec. code is "S") or Parallel (If parallel, please specify CL value, typical CL ranges from 8 to 32 pF)	

- The H49/U and H50/U series are the resistance-weld version of the old solder seal types HC-18/U and HC-25/U respectively. They are physically interchangeable.
- No solder or flux involved in the sealing process. Low aging.
- HC-49/U is wire lead type and HC-50/U is plug-in type.
- Two different holder heights to choose from: 13.6mm and 11.2mm.

Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	\pm ppm	Load capacitance(pF)	Can Style
11736	H49-32.000A3-S	MEC	Quartz Crystal	32.000	± 30 ppm	20pF	HC-49/U
3327	H49G-1.8432-20P	MEC	Quartz Crystal	1.8432	+/-30ppm	20pF	HC-49/U
3211	H49G-12.000393-20P	MEC	Quartz Crystal	12.000393MHz	± 30 ppm	20pF	HC-49/U
7854	H49G-2.000-20P	MEC	Quartz Crystal Units	2MHz	± 30 ppm	20pF	HC-49/U
3711	H49G-2.516-20P	MEC	Quartz Crystal	2.516MHz	30ppm	20pF	HC-49/U
6983	H49G-28.322-32P	MEC	MEC_Quartz Crystal	28.322MHz	± 30 ppm	32pF	HC-49/U



Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	\pm ppm	Load capacitance(pF)	Can Style
28721	HUS-11.0592-20P	MEC	Quartz Crystal Unit	11.0592MHz	30ppm	20pF	HC-49/S
33439	HUS-12.288-32P	MEC	Quartz Crystal Units	12.288MHz	30ppm	32pF	HC-49/S(10.77*4.34*3.5L/mm)
11226	HUS-6.000-18P	MEC	Quartz Crystal Units	6.000	30ppm	18pF	HC-49/S



Calibration Tolerance:	± 30 ppm ($\pm 0.003\%$) at 25°C
Frequency Stability:	AT-cut: ± 30 ppm ($\pm 0.003\%$) over -10 to +60°C BT-cut: ± 100 ppm ($\pm 0.01\%$) over -10 to +60°C
Shunt Capacitance (Co):	7pF maximum
Drive Level:	500 μ W maximum
Aging:	Less than ± 3 ppm per year. At +25°C
Reflow Soldering:	10 seconds maximum at +260°C
Storage Temperature:	-40 to +85°C
Packaging	12 mm pitch; 24 mm tape; 360 mm reel; 1000 pcs per reel.

- Model M49G is the surface mount version of the HC-49/US low profile crystal.
- Lowest cost. The most economic solution for automatic assembly.

Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	\pm ppm	Load capacitance(pF)	Can Style
15724	M49G-12.000-18P	MEC	MEC_SMD Quartz Crystal	12.000MHz	± 30 ppm	18pF	HC-49/SMD
23346	M49G-14.31818-18P	MEC	SMD Quartz Crystal	14.31818MHz	± 30 ppm	18pF	HC-49/SMD
23331	M49G-16.000-18P	MEC	SMD Quartz Crystal	16.000MHz	± 30 ppm	18pF	HC-49-SMD
23217	M49G-16.384-S	MEC	QUARTZ CRYSTAL UNIT	16.384MHz	+/-30ppm	18pF	HC-49/SMD



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Timing Function IC

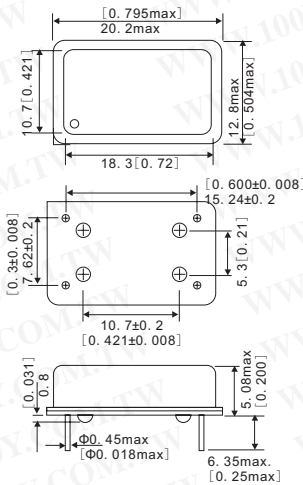
MEC_Crystal M49,M49L,HC-49 Series

Detailed product specifications are available on: us.100y.com.tw

Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	±ppm	Load capacitance(pF)	Can Style
15728	M49G-24.576-S	MEC	SMD Quartz Crystal	24.576MHz	30ppm	18pF	HC-49/SMD
15726	M49G-32.000BF-S	MEC	SMD Quartz Crystal	32.000MHz	±100ppm	18pF	HC-49/SMD
23212	M49G-4.000-20P	MEC	QUARTZ CRYSTAL UNIT	4.000MHz	+/-30ppm	20pF	HC-49/SMD
41087	M49G-4.433619-18P	MEC	MEC_SMD Quartz Crystal	4.433619MHz	±30ppm	18pF	HC-49/SMD(4.7*12.7*4.2mm)
32350	M49G-5.120-18P	MEC	SMD Quartz Crystal Unit	5.120MHz	±30ppm	18pF	HC-49/SMD
15725	M49G-6.000M-18P	MEC	SMD Quartz Crystal	6.000MHz	±30ppm	18pF	HC-49/S-SMD
40234	M49G-7.3728-18P	MEC	SMD Quartz Crystal Units	7.3728MHz	±30ppm	18pF	HC-49/SMD(4.7*12.7*4.2mm)
23327	M49G-8.000-18P	MEC	SMD Quartz Crystal	8.000MHz	±30ppm	18pF	HC-49/SMD
16911	M49G-AT-14.7456M-18P	MEC	SMD Quartz Crystal Unit	14.7456MHz	30ppm	20pF	HC-49/S-SMD
23333	M49G-AT-20.000M-18P	MEC	SMD Quartz Crystal Unit	20.000MHz	50ppm	20pF	HC-49/S-SMD
23335	M49G-AT-25.000M-18P		SMD Quartz Crystal Unit	25.000MHz	±30ppm	20pF	HC-49/SMD
28321	M49G-AT-27.000M-18P	MEC	QUARTZ CRYSTAL UNIT	27.000MHz	+/-30ppm	20pF	HC-49/SMD
28534	M49G-AT-3.6864M-1P	MEC	SMD Quartz Crystal Unit	3.6864MHz	30ppm	20pF	HC-49/S-SMD
23208	M49G-AT-4.9152-18P	MEC	QUARTZ CRYSTAL UNIT	4.9152MHz	+/-30ppm	18pF	HC-49/SMD
23210	M49G-AT-48.000A3-18P	MEC	QUARTZ CRYSTAL UNIT	48.000MHz	+/-30ppm	20pF	HC-49/SMD

MEC_H Series Clock Oscillators

Detailed product specifications are available on: us.100y.com.tw



Input Voltage (VDD)	V _{DD} = +3.3 V D.C. ±5%	V _{DD} = +5.0 V D.C. ±5%
Frequency Range (package dependent)	20 kHz ~ 125 Mhz	20 kHz ~ 160 Mhz
Output Logic	TTL / HCMOS	TTL / HCMOS
Start-up Time (Ts)	10 m Sec. max. 5 m Sec. Typical	
Current Consumption	15 ~ 45 mA (frequency dependent)	
Option on pin 1	Output is high impedance when "O" (≤8V) is applied to pin 1 Disable time is 150 n sec. Max. Please add "T" after the stability code for this option.	
Storage Temperature	-50°C to +100°C	
Aging	±5 ppm per year max.	

APPLICATION

- CPU, graphics, multimedia A/V clocks
- MPEG / DVD / HDTV clocks
- Laser engine pixel / set-top clocks
- Spread spectrum low EMI clocks
- OC-3, OC-12, OC-48 and OC-192 clocks
- Fast Ethernet and Gigabit Ethernet clocks
- NTSC / PAL encoder/decoder clocks
- PLL / synthesizer clocks
- Fibre channel and ADSL clocks
- SONET / SDH / ATM clocks

Unit: mm [inches]

Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	Tol. ±ppm	Operating Volt.	Input Current	Rise Fall time	Package
29022	3H14-B-11.2896MHz	MEC	H Series Clock Oscillators	11.2896MHz	±50ppm	3.3V	15-45mA	3nS max.	FULL CAN
13066	3H14-B-12.000MHz	MEC	H Series Clock Oscillators	12.000	±50ppm	3.3V	15-45mA	3ns	FULL CAN
19786	3H14-B-125.000MHz	MEC	H Series Clock Oscillators	125.000	±50ppm	3.3V	15-45mA	3nS max.	FULL CAN
6910	3H14-B-160.000MHz	MEC	H Series Clock Oscillators	160.000	±50ppm	3.3V	20mA	5ns Max	FULL CAN
6934	3H14-B-25.000MHz	MEC	H Series Clock Oscillators	25.000	±50ppm	3.3V	15-45mA	3ns	FULL CAN
6933	3H14-B-46.000MHz	MEC	H Series Clock Oscillators	46.000	±50ppm	3V	15-45mA	3ns	FULL CAN
6920	5H14-B-1.8432MHz	MEC	H Series Clock Oscillators	1.8432	±50ppm	5V	15-45mA	3ns	FULL CAN
41210	5H14-B-11.2896MHz	MEC	H Series Clock Oscillators	11.2896MHz	±50ppm	5V	15-45mA	3nS max.	FULL CAN
11673	5H14-B-2.048MHz	MEC	H Series Clock Oscillators	2.048MHz	±50ppm	5V	15-45mA	3ns	FULL CAN
6948	5H14-B-3.579545MHz	MEC	H Series Clock Oscillators	3.579545	±50ppm	5V	10mA	5ns max	FULL CAN
6938	5H14-B-32.000MHz	MEC	H Series Clock Oscillators	32.000	±50ppm	5V	15-45mA	3nS	FULL CAN
6935	5H14-B-42.000MHz	MEC	H Series Clock Oscillators	42.000	±50ppm	5V	15-45mA	3ns	FULL CAN
4521	5H14-B-48.000MHz	MEC	H Series Clock Oscillators	48.000	±50ppm	5V	15-45mA	3nS	FULL CAN
6930	5H14-B-60.000MHz	MEC	H Series Clock Oscillators	60.000	±50ppm	5V	15-45mA	3ns	FULL CAN
6922	5H14-B-8.000MHz	MEC	H Series Clock Oscillators	8.0000	±50ppm	5V	15-45mA	3nS	FULL CAN
41208	5H14B-16.9344MHz	MEC	H Series Clock Oscillators	16.9344MHz	±50ppm	5V	15-45mA	3nS max.	FULL CAN
41312	5H14G-B-33.8688MHz	MEC	H Series Clock Oscillators	33.8688MHz	±50ppm	5V	15-45mA	3nS max.	FULL CAN
45648	5H14G-D-11.2896MHz	MEC	H Series Clock Oscillators	11.2896MHz	±25ppm	5V	15-45mA	3nS max.	FULL CAN

- We provide a wide range of products to development and maintenance engineers in all type of business
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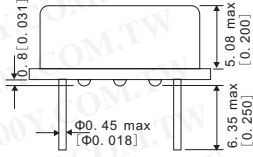
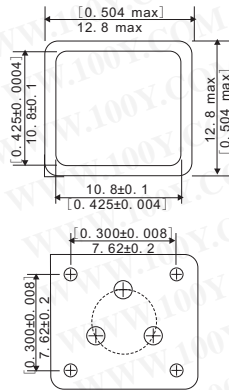
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Timing Function IC

MEC_H Series Clock Oscillators

Detailed product specifications are available on: us.100y.com.tw



Input Voltage (VDD)	V _{DD} = +3.3 V D.C. ±5%	V _{DD} = +5.0 V D.C. ±5%
Frequency Range (package dependent)	20 kHz ~ 125 Mhz	20 kHz ~ 160 Mhz
Output Logic	TTL / HCMOS	TTL / HCMOS
Start-up Time (Ts)	10 m Sec. max. 5 m Sec. Typical	
Current Consumption	15 ~ 45 mA (frequency dependent)	
Option on pin 1	Output is high impedance when "O" (≤8V) is applied to pin 1 Disable time is 150 n sec. Max. Please add "T" after the stability code for this option.	
Storage Temperature	-50°C to +100°C	
Aging	±5 ppm per year max.	

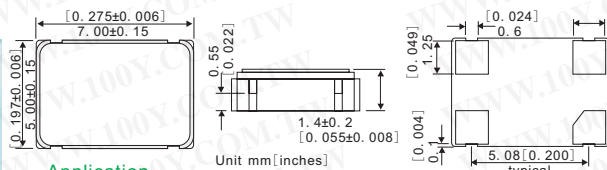
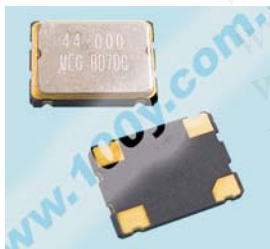
APPLICATION

- CPU, graphics, multimedia A/V clocks
- MPEG / DVD / HDTV clocks
- Laser engine pixel / set-top clocks
- Spread spectrum low EMI clocks
- OC-3, OC-12, OC-48 and OC-192 clocks
- Fast Ethernet and Gigabit Ethernet clocks
- NTSC / PAL encoder/decoder clocks
- PLL / synthesizer clocks
- Fibre channel and ADSL clocks
- SONET / SDH / ATM clocks

Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	Tol. ±ppm	Operating Volt.	Input Current	Rise Fall time	Package
13473	3H8G-B-1.8432MHz	MEC	H Series Clock Oscillators	1.8432	±50ppm	3.3V	15~45mA	3ns Max	HALF CAN
13313	3H8G-B-100.000MHz	MEC	H Series Clock Oscillators	100.000	±50ppm	3.3V	15~45mA	3nS max.	Half Size
16842	3H8G-B-11.0592MHz	MEC	H Series Clock Oscillators	11.0592	±50ppm	3.3V&5.5V	15~45mA	10ns Max	HALF CAN
40824	3H8G-B-12.000MHz	MEC	H Series Clock Oscillators	12.000MHz	±50ppm	3.3V	15~45mA	3ns	HALF CAN
13400	3H8G-B-14.31818MHz	MEC	H Series Clock Oscillators	14.3181	±50ppm	3.3V	15~45mA	3ns	HALF CAN
13478	3H8G-B-16.000MHz	MEC	H Series Clock Oscillators	16.000MHz	±50ppm	3.3V	15~45mA	3ns	HALF CAN
13314	3H8G-B-18.432MHz	MEC	H Series Clock Oscillator	18.432	±50ppm	3.3V	15~45mA	10ns Max	HALF CAN
13315	3H8G-B-2.000MHz	MEC	H Series Clock Oscillators	2.000MHz	±50ppm	3.3V	15~45mA	3ns	HALF-Size
13064	3H8G-B-24.576MHz	MEC	H Series Clock Oscillators	24.576	±50ppm	3.3V	30mA	5ns	HALF CAN
3210	3H8G-B-25.000MHz	MEC	H Series Clock Oscillators	25.000	±50ppm	3.3V	15~45mA	3nS max.	HALF CAN
13401	3H8G-B-30.000MHz	MEC	H Series Clock Oscillators	30.000	±50ppm	3.3V	15~45mA	10ns Max	HALF CAN
13350	3H8G-B-32.000MHz	MEC	H Series Clock Oscillators	32.000	±50ppm	3.3V	15~45mA	3nS	HALF CAN
13062	3H8G-B-48.000MHz	MEC	H Series Clock Oscillators	48.000	±50ppm	3.3V	15~45mA	3nS	HALF CAN
13310	3H8G-B-50.000MHz	MEC	H Series Clock Oscillators	50.000	±50ppm	3.3V	15~45mA	3nS max.	HALF CAN
13063	3H8G-B-6.000MHz	MEC	H Series Clock Oscillators	6.000MHz	±50ppm	3.3V	15~45mA	3ns	HALF CAN
13311	3H8G-B-60.000MHz	MEC	H Series Clock Oscillators	60.000	±50ppm	3.3V	15~45mA	3nS max.	HALF CAN
13306	3H8G-B-8.000MHz	MEC	H Series Clock Oscillators	8.0000	±50ppm	3.3V&5V	15~45mA	3nS	HALF CAN
13402	3H8G-B-8.192MHz	MEC	H Series Clock Oscillators	8.192	±50ppm	3.3V	15~45mA	3ns	HALF CAN
46115	5H8G-A-14.7456MHz	MEC	H Series Clock Oscillator	14.7456	±25ppm	5V	15~45mA	3nS	HALF CAN
12974	5H8G-B-24.000MHz	MEC	O.S.C 8 Pins Crystal Clock Oscillators	24.000	+/-50ppm	5V	30mA	5ns max.	HALF CAN
6923	5H8G-B-24.576MHz	MEC	H Series Clock Oscillators	24.576	25ppm	5V	15~45mA	3ns	HALF CAN
6906	5H8G-B-33.000MHz	MEC	H Series Clock Oscillators	33.000	±50ppm	5V	30mA	5ns Max	HALF CAN
6907	5H8G-B-33.330MHz	MEC	H Series Clock Oscillator	33.330	±50ppm	5V	15~45mA	10ns Max	HALF CAN
13308	5H8G-B-40.000MHz	MEC	H Series Clock Oscillators	40.000	±50ppm	5V	15~45mA	10nS max.	HALF CAN
13719	5H8G-B-80.000MHz		O.S.C (Half Can) 8 Pins Crystal Clock Oscillators	80.000M	25ppm	5V	50mA	5ns	HALF CAN
6958	5H8G-B-9.6000MHz	MEC	H Series Clock Oscillators	9.6000MHz	±50ppm	5V	15~45mA	3ns	HALF CAN

MEC_SWO Series Clock Oscillators

Detailed product specifications are available on: us.100y.com.tw



Application

- CPU, graphics, multimedia A/V clocks
- MPEG / DVD / HDTV clocks
- Laser engine pixel / set-top clocks
- Spread spectrum low EMI clocks
- OC-3, OC-12, OC-48 and OC-192 clocks
- Fast Ethernet and Gigabit Ethernet clocks
- NTSC / PAL encoder/decoder clocks
- PLL / synthesizer clocks
- Fibre channel and ADSL clocks
- SONET / SDH / ATM clocks

Input Voltage (VDD)	VDD = +3.3 V D.C. ±10%
Mercury Model	3SWO
Frequency Range	1.0 ~ 125.0 Mhz
Output Logic	TTL / HCMOS
Duty Cycle	50%±10%. (50±5% is also available)
Start-up Time (Ts)	1.0 ~ 32 MHz: 5 m sec. max. 32+ ~ 125 MHz: 10 m sec. Max.
Aging	±5 ppm per year max.

Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	Tol. ±ppm	Operating Volt.	Input Current	Rise Fall time	Package
48316	3SWO-BT-1.8432MHz	MEC	SWO Series Clock Oscillators	1.8432MHz	+/-50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48304	3SWO-BT-10.000MHz	MEC	SWO Series Clock Oscillators	10.000MHz	+/-50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48318	3SWO-BT-12.000MHz	MEC	SWO Series Clock Oscillators	12.000MHz	+/-50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48305	3SWO-BT-12.288MHz	MEC	SWO Series Clock Oscillators	12.288MHz	+/-50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48306	3SWO-BT-14.31818MHz	MEC	SWO Series Clock Oscillators	14.31818MHz	+/-50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48319	3SWO-BT-14.7456MHz	MEC	SWO Series Clock Oscillators	14.7456MHz	+/-50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48320	3SWO-BT-16.000MHz	MEC	SWO Series Clock Oscillators	16.000MHz	+/-50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48321	3SWO-BT-16.384MHz	MEC	SWO Series Clock Oscillators	16.384MHz	+/-50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48322	3SWO-BT-18.432MHz	MEC	SWO Series Clock Oscillators	18.432MHz	+/-50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48307	3SWO-BT-20.000MHz	MEC	SWO Series Clock Oscillators	20.000MHz	+/-50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48308	3SWO-BT-24.000MHz	MEC	SWO Series Clock Oscillators	24.000MHz	+/-50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm



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Timing Function IC

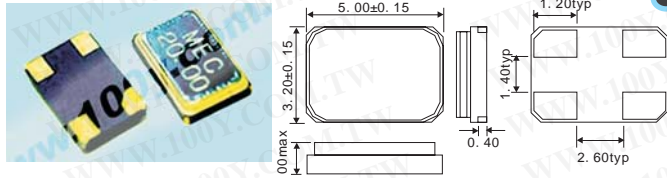
MEC_SWO Series Clock Oscillators

Detailed product specifications are available on: us.100y.com.tw

Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	Tol. \pm ppm	Operating Volt.	Input Current	Rise Fall time	Package
48323	3SWO-BT-24.576MHz	MEC	SWO Series Clock Oscillators	24.576MHz	\pm 50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48324	3SWO-BT-25.000MHz	MEC	SWO Series Clock Oscillators	25.000MHz	\pm 50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48309	3SWO-BT-27.000MHz	MEC	SWO Series Clock Oscillators	27.000MHz	\pm 50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48325	3SWO-BT-29.4912MHz	MEC	SWO Series Clock Oscillators	29.4912MHz	\pm 50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48300	3SWO-BT-3.6864MHz	MEC	SWO Series Clock Oscillators	3.6864MHz	\pm 50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48326	3SWO-BT-32.000MHz	MEC	SWO Series Clock Oscillators	32.000MHz	\pm 50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48327	3SWO-BT-32.768MHz	MEC	SWO Series Clock Oscillators	32.768MHz	\pm 50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48310	3SWO-BT-33.333MHz	MEC	SWO Series Clock Oscillators	33.333MHz	\pm 50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48328	3SWO-BT-35.328MHz	MEC	SWO Series Clock Oscillators	35.328MHz	\pm 50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48302	3SWO-BT-4.000MHz	MEC	SWO Series Clock Oscillators	4.000MHz	\pm 50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48329	3SWO-BT-40.000MHz	MEC	SWO Series Clock Oscillators	40.000MHz	\pm 50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48311	3SWO-BT-44.000MHz	MEC	SWO Series Clock Oscillators	44.000MHz	\pm 50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48330	3SWO-BT-45.000MHz	MEC	SWO Series Clock Oscillators	45.000MHz	\pm 50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48312	3SWO-BT-49.152MHz	MEC	SWO Series Clock Oscillators	49.152MHz	\pm 50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48313	3SWO-BT-50.000MHz	MEC	SWO Series Clock Oscillators	50.000MHz	\pm 50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48314	3SWO-BT-60.000MHz	MEC	SWO Series Clock Oscillators	60.000MHz	\pm 50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48331	3SWO-BT-66.666MHz	MEC	SWO Series Clock Oscillators	66.666MHz	\pm 50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48317	3SWO-BT-7.3728MHz	MEC	SWO Series Clock Oscillators	7.3728MHz	\pm 50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48303	3SWO-BT-8.000MHz	MEC	SWO Series Clock Oscillators	8.000MHz	\pm 50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm
48315	3SWO-BT-80.000MHz	MEC	SWO Series Clock Oscillators	80.000MHz	\pm 50ppm	3.3V	15mA max.	7n sec. max.	5*7*1.4mm

MEC_MJ,MF,MQ Series Crystals

Detailed product specifications are available on: us.100y.com.tw



Green Requirement	RoHS compliant and Pb (lead free)
Storage Temperature	-40°C to +85°C
Gross Leak	1 Kg Pressurized water immersion test per Mercury internal procedures
Thermal Shock	Temperature cycling: Exposed at -40°C for 30 minutes then to +85°C for 30 minutes for duration of 5 days
Marking Permanency	MIL-STD-202, Method 215. Laser engraved.
Insulation Resistance	500 MW min. at 100 V \pm 15 V DC

- Ultra-miniature 5x3.2 mm; ultra thin 1.0 mm height
- Gold plated ceramic base with metal lid seam welded package
- Extremely low aging. Specifically designed for hand-held communication equipment, MP3, PDAs, GPS and W-LAN.

- High shock resistance and vibration resistance
- RoHS compliant and lead free product

Part No.	Product No.	Manufacturer	Description	Frequency(MHz)	\pm ppm	Load capacitance(pF)	Can Style
48041	MJ-10.000-20P	MEC	5*3.2 Surface Mount Crystal	10.000MHz	\pm 30ppm	20PF	5*3.2*1mm
48042	MJ-11.0592-20P	MEC	5*3.2 Surface Mount Crystal	11.0592MHz	\pm 30ppm	20PF	5*3.2*1mm
48017	MJ-12.000-20P	MEC	5*3.2 Surface Mount Crystal	12.000MHz	\pm 30ppm	20PF	5*3.2*1mm
48018	MJ-12.288-20P	MEC	5*3.2 Surface Mount Crystal	12.288MHz	\pm 30ppm	20PF	5*3.2*1mm
48020	MJ-13.000-16P	MEC	5*3.2 Surface Mount Crystal	13.000MHz	\pm 30ppm	16PF	5*3.2*1mm
48043	MJ-13.500-20P	MEC	5*3.2 Surface Mount Crystal	13.500MHz	\pm 30ppm	20PF	5*3.2*1mm
48044	MJ-13.560-20P	MEC	5*3.2 Surface Mount Crystal	13.560MHz	\pm 30ppm	20PF	5*3.2*1mm
48021	MJ-14.31818-20P	MEC	5*3.2 Surface Mount Crystal	14.31818MHz	\pm 30ppm	20PF	5*3.2*1mm
48022	MJ-14.7456-20P	MEC	5*3.2 Surface Mount Crystal	14.7456MHz	\pm 30ppm	20PF	5*3.2*1mm
48045	MJ-15.360-12P	MEC	5*3.2 Surface Mount Crystal	15.360MHz	\pm 30ppm	12PF	5*3.2*1mm
48023	MJ-16.000-20P	MEC	5*3.2 Surface Mount Crystal	16.000MHz	\pm 30ppm	20PF	5*3.2*1mm
48024	MJ-16.384-20P	MEC	5*3.2 Surface Mount Crystal	16.384MHz	\pm 30ppm	20PF	5*3.2*1mm
48054	MJ-16.9344-12	MEC	5*3.2 Surface Mount Crystal	16.9344MHz	\pm 30ppm	20PF	5*3.2*1mm
48027	MJ-18.432-20P	MEC	5*3.2 Surface Mount Crystal	18.432MHz	\pm 30ppm	20PF	5*3.2*1mm
48055	MJ-19.200-20P	MEC	5*3.2 Surface Mount Crystal	19.200MHz	\pm 30ppm	20PF	5*3.2*1mm
48056	MJ-19.440-20P	MEC	5*3.2 Surface Mount Crystal	19.440MHz	\pm 30ppm	20PF	5*3.2*1mm
48057	MJ-19.6608-20P	MEC	5*3.2 Surface Mount Crystal	19.6608MHz	\pm 30ppm	20PF	5*3.2*1mm
48058	MJ-19.680-20P	MEC	5*3.2 Surface Mount Crystal	19.680MHz	\pm 30ppm	20PF	5*3.2*1mm
48059	MJ-19.800-20P	MEC	5*3.2 Surface Mount Crystal	19.800MHz	\pm 30ppm	20PF	5*3.2*1mm
48060	MJ-20.000-20P	MEC	5*3.2 Surface Mount Crystal	20.000MHz	\pm 30ppm	20PF	5*3.2*1mm
48061	MJ-20.945-20P	MEC	5*3.2 Surface Mount Crystal	20.945MHz	\pm 30ppm	20PF	5*3.2*1mm
48062	MJ-22.1184-20P	MEC	5*3.2 Surface Mount Crystal	22.1184MHz	\pm 30ppm	20PF	5*3.2*1mm
48028	MJ-24.000-20P	MEC	5*3.2 Surface Mount Crystal	24.000MHz	\pm 30ppm	20PF	5*3.2*1mm
48029	MJ-24.576-20P	MEC	5*3.2 Surface Mount Crystal	24.576MHz	\pm 30ppm	20PF	5*3.2*1mm
48025	MJ-25.000-20P	MEC	5*3.2 Surface Mount Crystal	25.000MHz	\pm 30ppm	20PF	5*3.2*1mm
48046	MJ-26.000-20P	MEC	5*3.2 Surface Mount Crystal	26.000MHz	\pm 30ppm	20PF	5*3.2*1mm
48047	MJ-28.880-20P	MEC	5*3.2 Surface Mount Crystal	28.880MHz	\pm 30ppm	20PF	5*3.2*1mm
48048	MJ-29.500-16P	MEC	5*3.2 Surface Mount Crystal	29.500MHz	\pm 30ppm	16PF	5*3.2*1mm
48049	MJ-30.000-20P	MEC	5*3.2 Surface Mount Crystal	30.000MHz	\pm 30ppm	20PF	5*3.2*1mm
48050	MJ-32.000-20P	MEC	5*3.2 Surface Mount Crystal	32.000MHz	\pm 30ppm	20PF	5*3.2*1mm
48051	MJ-32.768-20P	MEC	5*3.2 Surface Mount Crystal	32.768MHz	\pm 30ppm	20PF	5*3.2*1mm
48052	MJ-40.000-20P	MEC	5*3.2 Surface Mount Crystal	40.000MHz	\pm 30ppm	20PF	5*3.2*1mm
48053	MJ-44.000-20P	MEC	5*3.2 Surface Mount Crystal	44.000MHz	\pm 30ppm	20PF	5*3.2*1mm
48026	MJ-48.000-20P	MEC	5*3.2 Surface Mount Crystal	48.000MHz	\pm 30ppm	20PF	5*3.2*1mm



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