深圳市万利好电子有限公司

Shenzhen Merlin Electronics Co., Ltd.

SPECIFICATION FOR APPROVAL

CUSTOMER _____

NOMINAL FREQUENCY 8.0000 MHz

HOLDER TYPE DIP 8 HALF SIZE CRYSTAL CLOCK CXO

SPEC. NO. (P/N) _____

CUSTOMER P/N _____

ISSUE DATE _____

APPROVED	PREPARED	QA
		
APPROVED BY CUSTOMER：		**AVL Status**

DIP 8 HALF SIZE CRYSTAL CLOCK CXO

TYPE : DIP HALF SIZE CRYSTAL CLOCK CXO SIZE 12.9 x 12.9 x 5.5

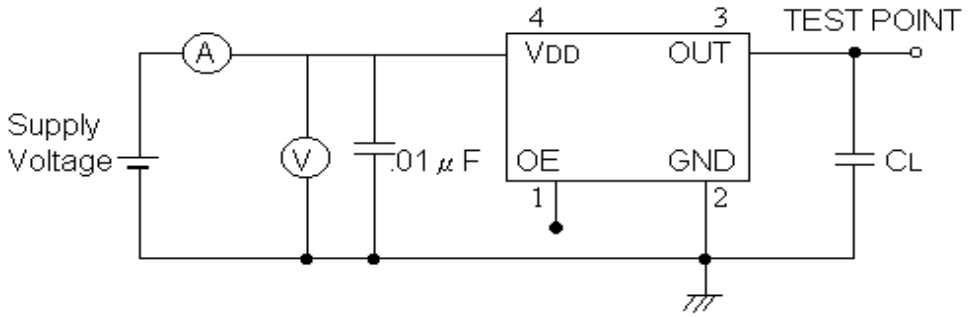
ELECTRICAL SPECIFICATIONS

Item	Symbol	Specifications				Notes
		Min	Type	Max	Units	
Nominal frequency	FO		8.0000		MHz	
Mode of Oscillation	OT	☐ Fundamental	■ 3 Overtone	☐ 5 Overtone		
Frequency Tolerance/Stability	FT		± 30		ppm	with working temperature Reference to 25℃ frequency
Working temperature range	TR		-20~70		℃	
Supply Voltage	Vcc/Vdd		5		V	± 10%
Fan out type	LT		CMOS			
Current consumption	OI/Idd		30		mA	Max.
Symmetry	DC/SY		40~60		%	
Rise / Fall time	rf		6		ns	Max.
Output Voltage Voh			4.5		V	
Output Voltage Vol			0.5		V	
E / D (PIN#1)			NC			
Output driving ability	CL		15		pF	
Storage temperature range			-40 ~ 85		℃	
Aging			5		ppm/yr.	
Start Up Time			10		ms	
Unit Weight			1.91 ± 5 %		g	

※ This product doesn't include harmful substance that stipulated by SONY SS-00259 Level 1 and S-AT2-001 Level 1 standard.

DIP 8 HALF SIZE CRYSTAL CLOCK CXO

TEST DIAGRAM

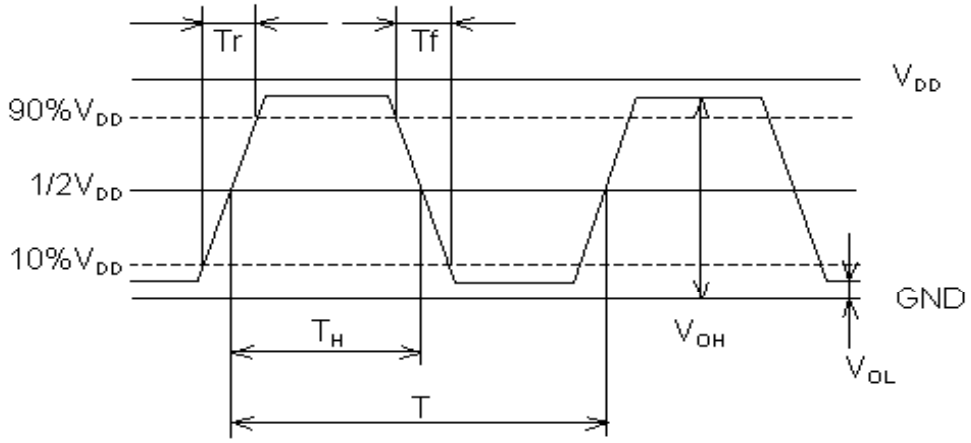


CL: 15pF
(Including Probe and Fixture Capacitance)

Reset Function :

Logic 0 On Pad - Disable Output to High Impedance
Logic 1 or Open On Pad 1 - Oscillator Output

WAVEFORM CONDITIONS



Symmetry=TH / T × 100 (%)

Notes: 1. Pad 1 options a. N/C
b. Control input (output enable/disable)
2. Waveform measurement system should have a min. Bandwidth of 5 times the frequency being tested.

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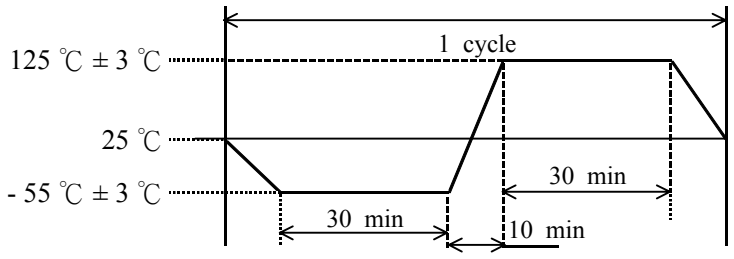
RELIABILITY SPECIFICATIONS

NO.	TEST ITEM	TEST METHODS	
1	DROP TEST	Device are dropped from a height of 75 cm onto 2 mm thickness stainless plate executing 3 times of random drops.	
2	MECHANICAL SHOCK	Device are shocked to half sine wave (100 G) three mutually perpendicular axes each 3 times.	
3	VIBRATION	Frequency range	10 ~ 55 Hz
		Amplitude	1.5 mm
		Sweep Time	1 minute
		Test Time	2 hours for each direction
4	SOLDERABILITY	MIL - STD - 202G Method 208H	
		Temperature	245℃±5℃
		Material	H63A (Silver 2 ~ 3 %)
		Immersion time	5 ± 0.5 seconds
		Flux	Rosin resin methyl alcohol solvent (1 : 4)
5	RESISTANCE TO SOLDERING HEAT	MIL - SLD -202G, Method 210F 10 sec immersion into 260 ± 5℃ solder pot, above 180℃ is 90 ~ 120 sec.	
6	LOW TEMP. STORAGE	Leave at - 55 ℃ ± 3℃ for 500 ± 12 hours	
7	HIGH TEMP. STORAGE	Leave at 125 ℃ ± 3℃ for 500 ± 12 hours	
8	THERMAL SHOCK	Total 5 cycles of the following temperature cycle	



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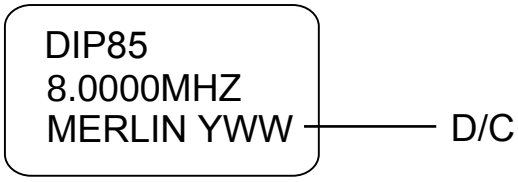
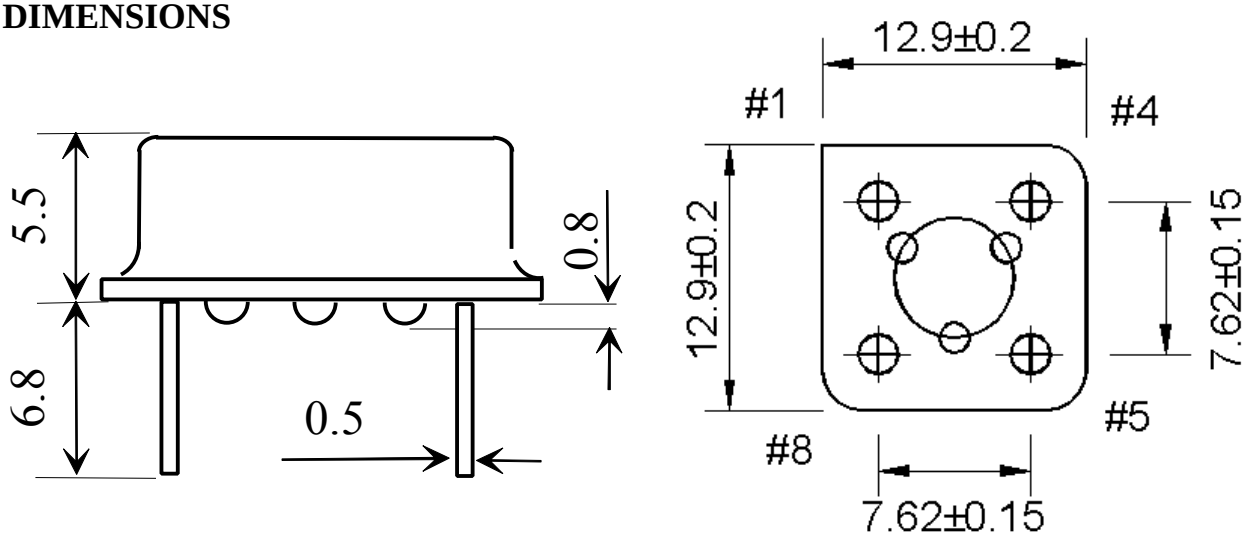
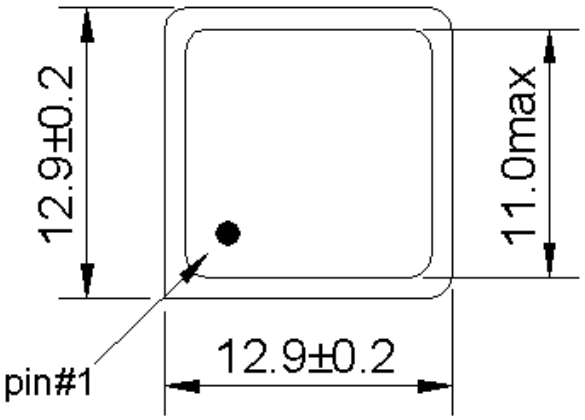
MARKING



DIMENSIONS





PIN	Connection
1	N.C or Tri-state
4	GND
5	Output
8	VDD

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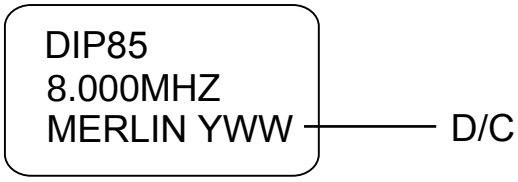

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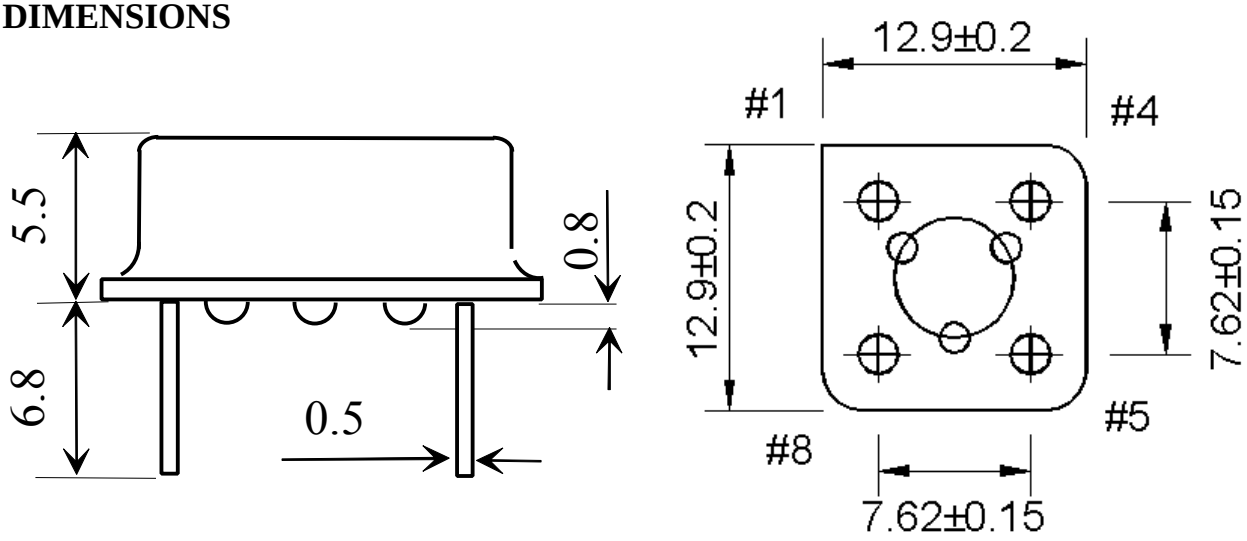

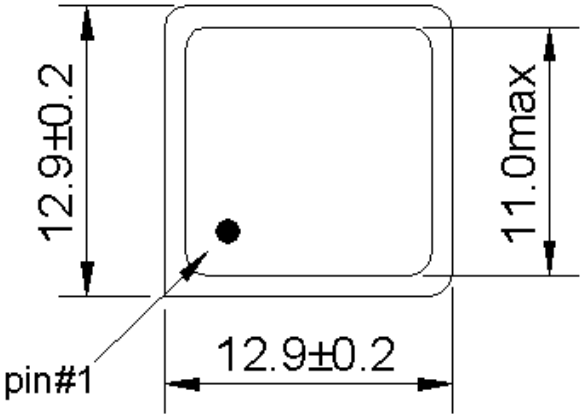

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