

Lianyungang Macrobiz Co., Ltd.

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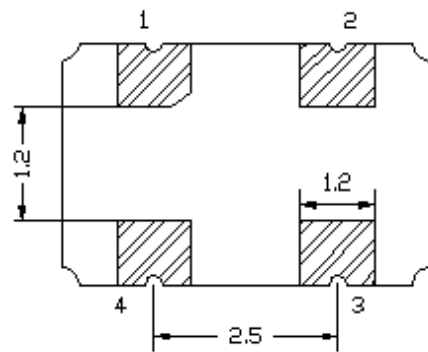
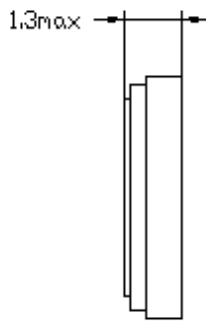
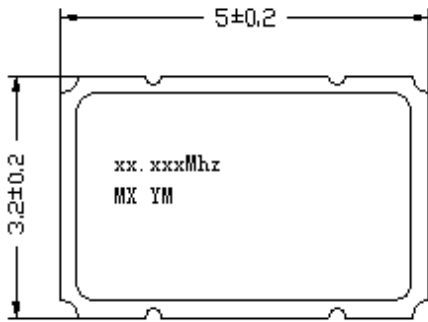
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Specifications of Oscillator 5.0\*3.2

SMD OS53

**DIMENSION AND MARKING**



PIN	FUNCTION
1	Tri-state
2	Ground
3	Output
4	Vdd

**ELECTRICAL SPECIFICATION**

<b>TYPE</b>	: 5*3.2 SMD Oscillator
<b>Frequency Range</b>	: 1.000Mhz to 150Mhz
<b>Frequency Stability</b>	: ±25ppm to ±50ppm
<b>Supply Voltage</b>	: 5.0V or 3.3V ±10%
<b>Operating Temperature Range</b>	: -10°C ~ +60°C or -40°C ~ +85°C
<b>Storage Temperature Range</b>	: -40°C ~ +85°C or -55°C ~ +125°C
<b>Symmetry (Duty Cycle)</b>	: 40/60 Standard
<b>Output Load</b>	: 10TTL or 15pF HCMOS
<b>Current Consumption (15pF only)</b>	: 1.000~36.000Mhz : 25mA Max
( 5.0V )	: 36.000~70.000Mhz : 60mA Max
	: 70.000~150.00Mhz : 80mA Max
<b>Current Consumption (15pF only)</b>	: 1.000~36.000Mhz : 20mA Max
( 1.8V, 2.5V, 2.85V, 3.3V )	: 36.000~70.000Mhz : 40mA Max
	: 70.000~150.00Mhz : 60mA Max
<b>Rise/Fall Time</b>	: 10nS Max

Special Instructions:

Tape and Reel  
RoHS Compliant

NOTE:



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**RELIABILITY**

NO	ITEM	CONDITIONS	BASIS OF VERDICT
1	DROP	High:100cm;Thickness:3cm;3tims	$\Delta FL \pm 5 \text{ppm Max}$
2	VIBRATION	Frequency:10~57.7Hz: Amplitude: $\pm 0.75 \text{mm}$ Frequency:57.7Hz~500Hz: acceleration rate: $98 \text{m/s}^2$ Cycle time:10-500-10Hz: 15min Direction:X,Y, Z Duration: 2 h/direction	$\Delta FL \pm 5 \text{ppm Max}$
3	TEMPERATURE SHOCK	$-40^\circ\text{C} \pm 2^\circ\text{C}(30\text{min})$ -- $85^\circ\text{C} \pm 2^\circ\text{C}(30\text{min})$ ;For 10 cycles	$\Delta FL \pm 5 \text{ppm Max}$
4	HUMIDITY	Temp: $40^\circ\text{C} \pm 2^\circ\text{C}$ ;Humidity:90-95%;Times:96h	$\Delta FL \pm 5 \text{ppm Max}$
5	COLD RESISTANCE	Temp: $-40^\circ\text{C} \pm 2^\circ\text{C}$ ;Times:96h	$\Delta FL \pm 5 \text{ppm Max}$
6	HEAT RESISTANCE 1	Temp: $100^\circ\text{C} \pm 2^\circ\text{C}$ ;Times:96h	$\Delta FL \pm 5 \text{ppm Max}$
7	HEAT RESISTANCE 2	Temp: $155^\circ\text{C} \pm 2^\circ\text{C}$ ;Times:2h	$\Delta FL \pm 5 \text{ppm Max}$
8	HEAT RESISTANCE 3	Temp: $85^\circ\text{C} \pm 2^\circ\text{C}$ ; Voltage:3.3V / 5.0V Times:96h	$\Delta FL \pm 5 \text{ppm Max}$
9	REFLOW	<p><math>270^\circ\text{C} \pm 5^\circ\text{C}</math></p> <p><math>150^\circ\text{C} \pm 5^\circ\text{C}</math></p> <p>120sec      10sec max</p> <p>CYCLE TIME: 200sec Max.</p>	$\Delta FL \pm 5 \text{ppm Max}$
10	AGING	Temp: $85^\circ\text{C}$ ;Times:30days	$\Delta FL \pm 5 \text{ppm Max}$
11	LEAKAGE	He(0.6~0.65MPa):10min	$3 \times 10^{-9} \text{Pa} \cdot \text{m}^3/\text{s Max}$
12	SOLDER	Temp: $235^\circ\text{C} \pm 5^\circ\text{C}$	$\Delta FL \pm 5 \text{ppm Max}$

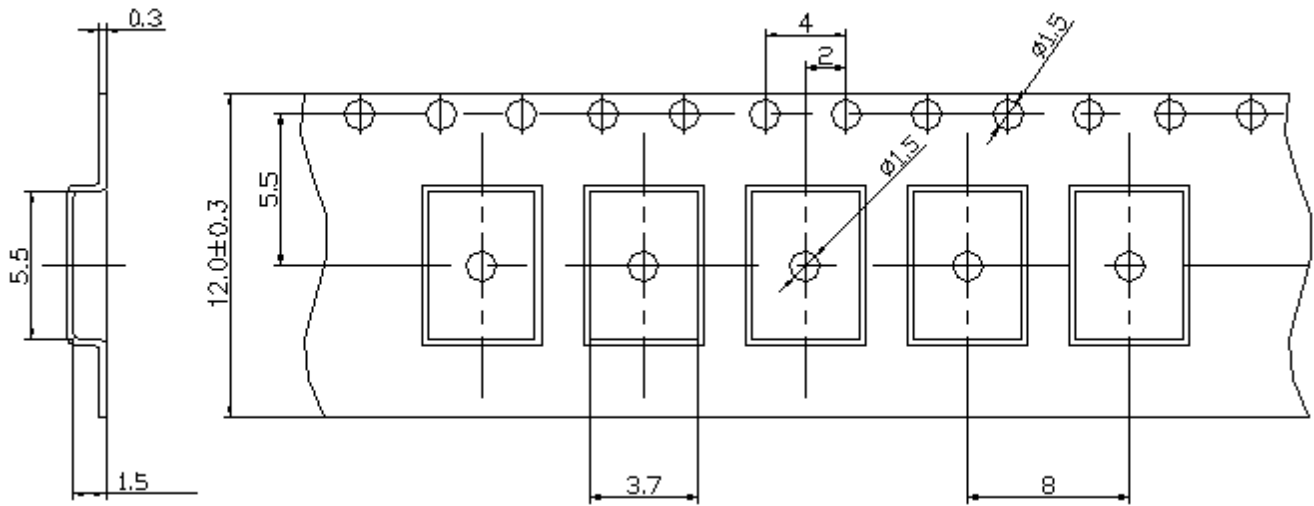
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OS53

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### Tape



### Reel

