



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China





PSE Technology Corporation

SPECIFICATION FOR APPROVAL

CUSTOMER	
NOMINAL FREQUENCY	32.768 KHz
HOLDER TYPE	TYPE G3 Cylinder SMD Quartz Crystal
SPEC. NO. (P/N)	G33270010
CUSTOMER P/N	
ISSUE DATE	Mar.2,2011
VERSION	A

APPROVED	PREPARED	QA
<i>Brenda</i>	<i>Niki Lu</i>	<i>Lillian</i>
APPROVED BY CUSTOMER :		AVL Status
Please return one copy with approval to PSE-TW		

PSE Technology Corporation

No.2, Tzu-Chiang 5th Rd, Chung Li Industrial Park,
 Chung Li City, Taoyuan County, Taiwan (R.O.C.)
 TEL: 886-3-451-8888
 FAX: 886-3-461-3865
<http://www.saronix-ecera.com.tw>

- *RoHS Exception
- *HF-Halogen Free
- *REACH Compliant

*** A company of **PERICOM Semiconductor Corporation** ***

TYPE G3 Cylinder SMD Quartz Crystal

G33270010

VER. A 2-Mar-11

ELECTRICAL SPECIFICATIONS

SRe Part Number : G33270010

Parameters	Symbol	Specifications	Units	Notes
Nominal Frequency	Fn	32.768	KHz	
Mode of Oscillation	MO	Fundamental		+2° X-Cut
Load Capacitance	CL	6	pF	Typical
Calibration Tolerance		± 20	ppm	at 25°C ± 5°C
Operating Temperature Range	TR	-10~60	°C	
Drive Level	DL	1	μW	Max.
Series Resonant Resistance	CI/RR	50	KΩ	Max.
Temperature Coefficient	K	-0.035	ppm/°C ²	Typical
Aging		± 3	ppm	Max 1st year
Insulation Resistance		500	MΩ	at DC 100V ± 15V

Reliability (Mechanical and Environmental Endurance)

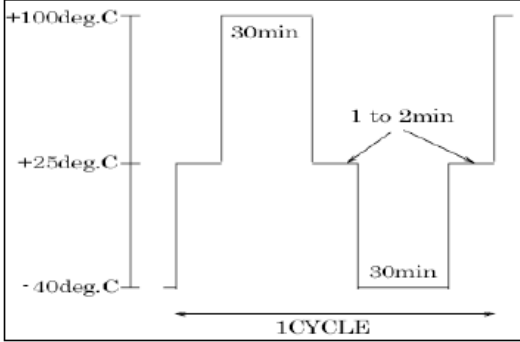
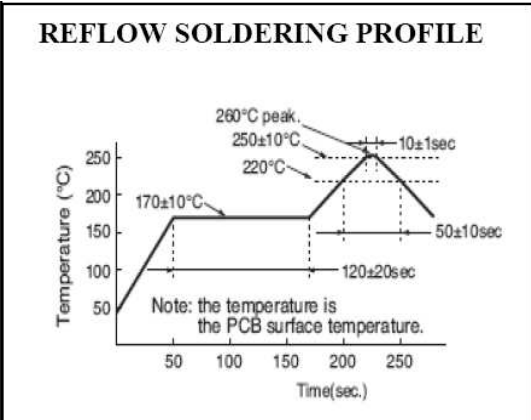
No.	Test Items	Test Method and Condition	Requirements
1	Vibration	(1) Vibration Frequency: 10 to 55Hz (2) Vibration Amplitude: 1.5mm (3) Cycle Time: 1-2min(10-55-10Hz) (4) Direction: X.Y.Z (5) Duration: 2h/each direction	Frequency Change: ±10ppm Max. Resistance Change: ±15% or 5kΩ Max.
2	Shock	3 Times free drop from 75cm height to hard wooden board of thickness more than 30mm	Frequency Change: ±10ppm Max. Resistance Change: ±15% or 5kΩ Max.
3	Hermetic seal	Checked: before the molded crystal units	less than 1×10^{-7} mbar.l/sec.
4	High temperature	240 hours at +85°C ± 2°C After 1-2 hours past at room temperature from following test.	Frequency Change: ±10ppm Max. Resistance Change: ±25% or 10kohm Max.



TYPE G3 Cylinder SMD Quartz Crystal

G33270010

VER. A 2-Mar-11

5	Low temperature	240 hours at $-40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ After 1-2hours past at room temperature from following test.	Frequency Change: $\pm 10\text{ppm Max.}$ Resistance Change: $\pm 15\%$ or 5kohm Max.
6	Humidity	240 hours at $+85^{\circ}\text{C} \pm 2^{\circ}\text{C}$,relative humidity 90-95% After 1-2hours past at room temperature from following test.	Frequency Change: $\pm 10\text{ppm Max.}$ Resistance Change: $\pm 25\%$ or 10kohm Max.
7	Temperature cycle	After supplying the following temperature cycle (50cycles) 	Frequency Change: $\pm 10\text{ppm Max.}$ Resistance Change: $\pm 25\%$ or 10kohm Max.
8	Solderability	Dip the leads of crystal units into the solution (7-10%) of rosin 3 \pm 0.5s,then dip it into the tank 5-10s. Temperature of solder melted tank is $245^{\circ}\text{C} \pm 5^{\circ}\text{C}$	The dipped surface of the leads should be at least 95% covered with continuous new solder coating
9	Reflow soldering	The REFLOW SOLDERING PROFILE of Fig.1 for TMXLi-206F families. 	After 24h past from frequency test, Frequency Change: $\pm 10\text{ppm Max.}$ Resistance Change: $\pm 25\%$ or 10kohm Max. Notice: 1 · Using the infrared lamp at soldering process may cause uneven temperature rise on plastic surface of the parts,so that please keep the package temperature within left conditions. 2 · DO NOT dip the plastic part into solder.

TYPE G3 Cylinder SMD Quartz Crystal

G33270010

VER. A 2-Mar-11

MARKING

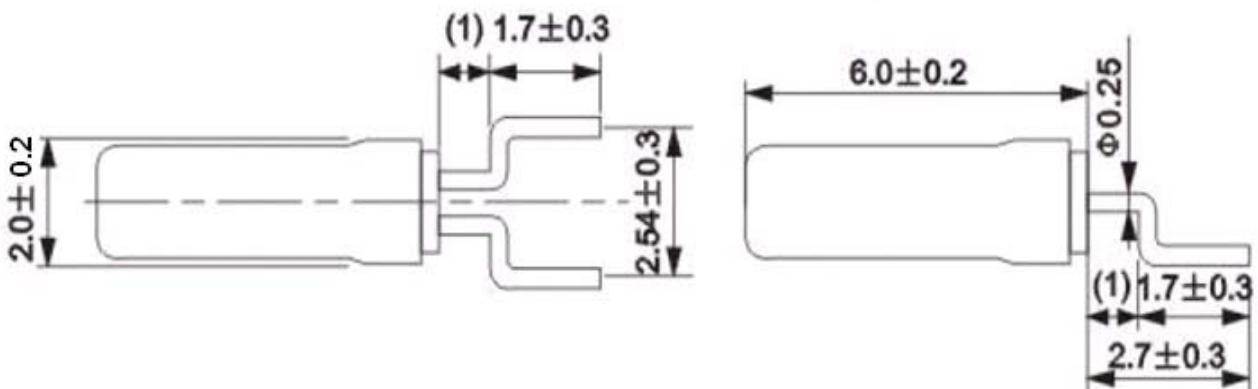
eBAmv

————— Date & Factory Code

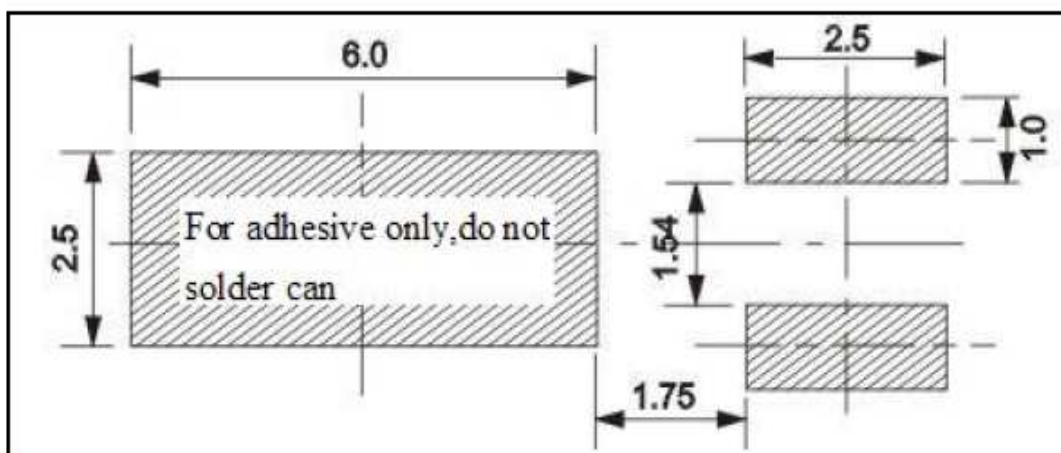
m
|
Date Code

v
|
Factory Code

DIMENSIONS (Unit:mm)



■ SOLDER PATTERN

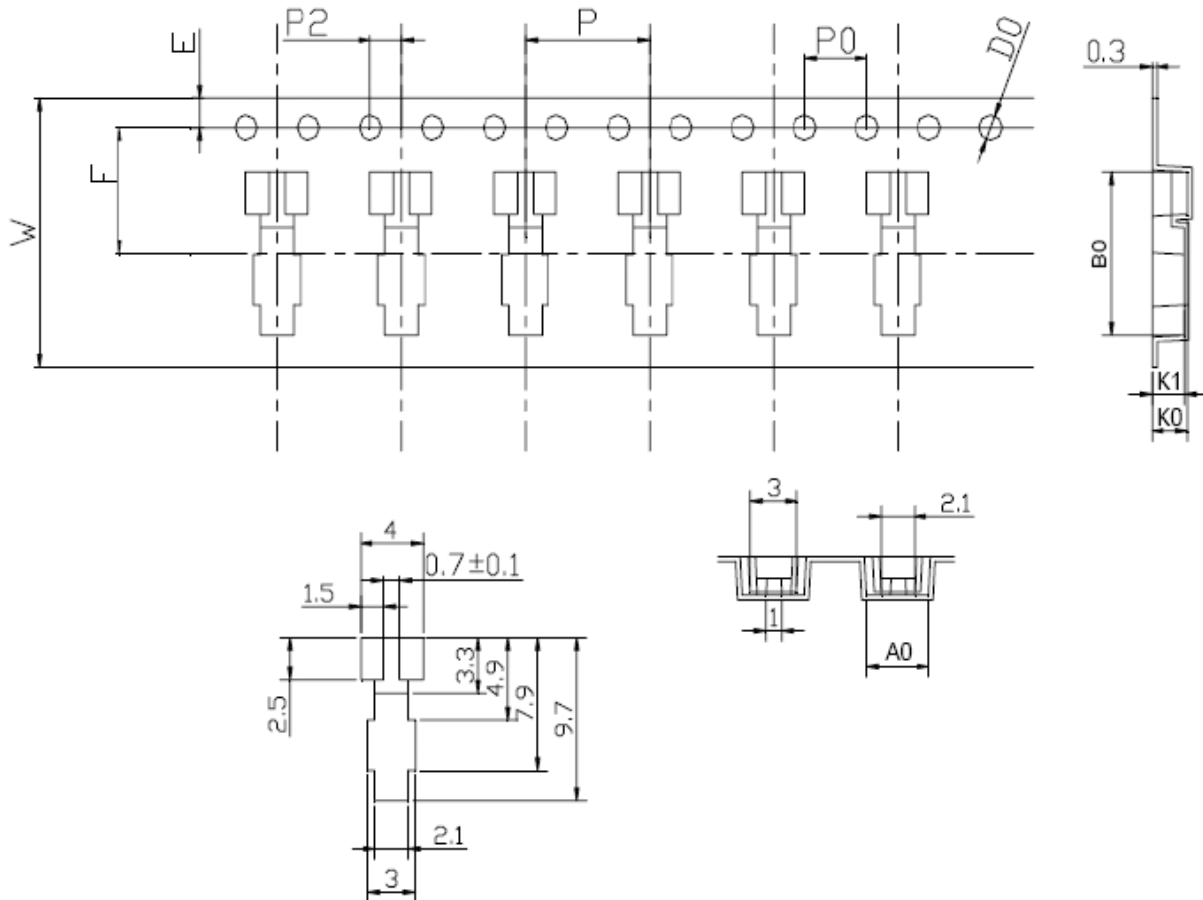


TYPE G3 Cylinder SMD Quartz Crystal

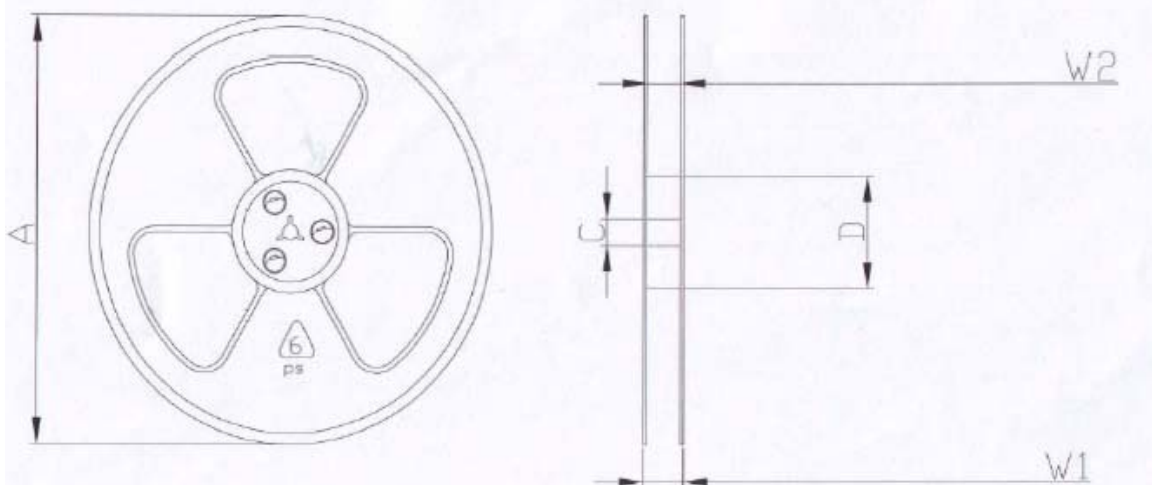
G33270010

VER. A 2-Mar-11

Packing



W	A0	B0	E	F	P	P0	P2	D0	K0	K1
16 ^{+0.30} _{-0.30}	4.0 ^{+0.10} _{-0.10}	9.7 ^{+0.10} _{-0.10}	1.75 ^{+0.10} _{-0.10}	7.5 ^{+0.10} _{-0.10}	8 ^{+0.10} _{-0.10}	4 ^{+0.10} _{-0.10}	2 ^{+0.15} _{-0.15}	1.5 ^{+0.15} _{-0.00}	2.3 ^{+0.10} _{-0.10}	2.1 ^{+0.10} _{-0.10}



A±0.5	C±0.2	D±0.3	W1±0.2	W2 ^{+0.4} _{-0.2}
330	25	100	20	16

TYPE G3 Cylinder SMD Quartz Crystal

G33270010

VER. A 2-Mar-11

Packing

