SPECIFICATION

Customer :

Customer P/N : **OS70504A-ACAN-48.00MHz**

Agent :

Agent Code :

Order Code :

P/N :

Customer Approval :

东莞市大普通信技术有限公司

Dongguan DAPU Telecom Technology co.,Ltd

市场/SALE DEPARTMENT

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品质部/QUALITY ASSURANCE DEPT

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研发部/R&D DEPT.

TEL:0769-81867888-828

Date :

Approved By:

Checked By:

Designer :

1、 Scope:

1.1	Description:	SMD Crystal Oscillator
1.2	Center Frequency:	48.00MHz
1.3	Dimension & Drawing No:	OS70504A-ACAN-48.00MHz

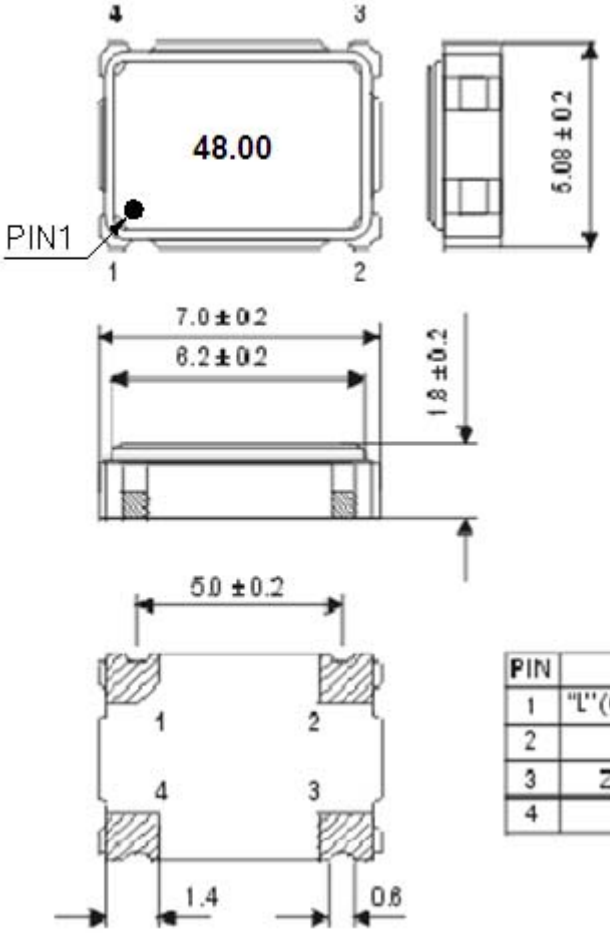
2、 Construction:

2.1 Oscillators series: SMD7×5 XO

3、 Electrical Characteristics

3.1	Nominal Frequency:	48.00MHz
3.2	Frequency Tolerance:	≤±20ppm @ at 25℃ ± 3℃
3.3	Aging:	≤±3ppm/first year
3.4	Temperature Tolerance	≤±40ppm
3.5	Operating Temperature Range:	-40℃to+85℃
3.6	Storage Temperature Range:	-55℃to+125℃
3.7	Input Voltage:	+3.3VDC±5%
3.8	Current Consumption:	22mA Max
3.9	Output Waveform:	HCMOS
3.10	Rise/Fall Time:	≤6ns
3.11	Output Voltage $V_{OL:}$	≤0.1Vcc
	$V_{OH:}$	≥0.9Vcc
3.12	Output Load:	15pF~20pF
3.13	Start up Time:	≤10ms
3.14	Rating empty	50%±10%
3.15	Symmetry	50%±10% at 1/2Vcc level
3.16	Enable/Disable time	100ns Max
3.17	Reflow soldering cond.	10 seconds Max at 240℃

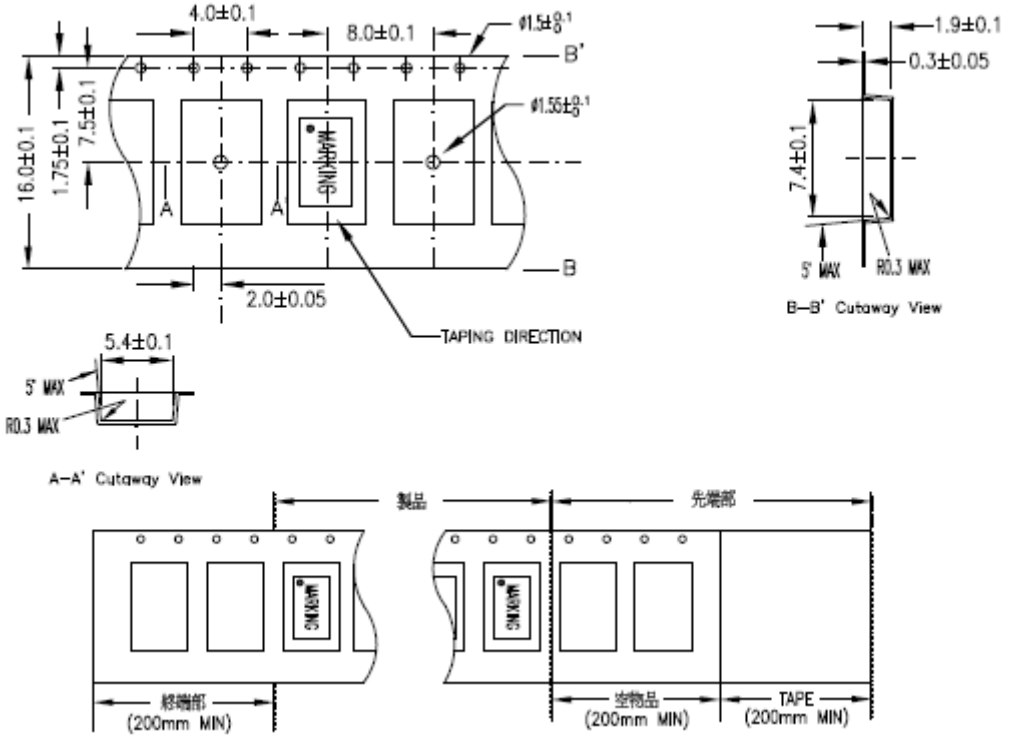
4. Figure



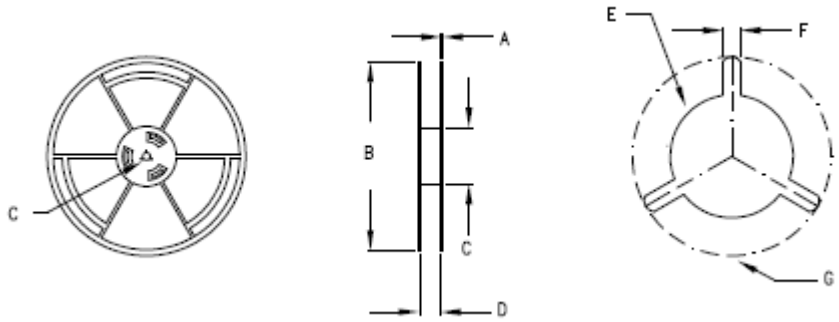
PIN	CONNECTION	
1	"L" (0V)	"H" (+3V) or OPEN
2	GND	
3	Z	OUTPUT
4	Vcc	

Unit : mm

5. Carrier Type



6. Reel

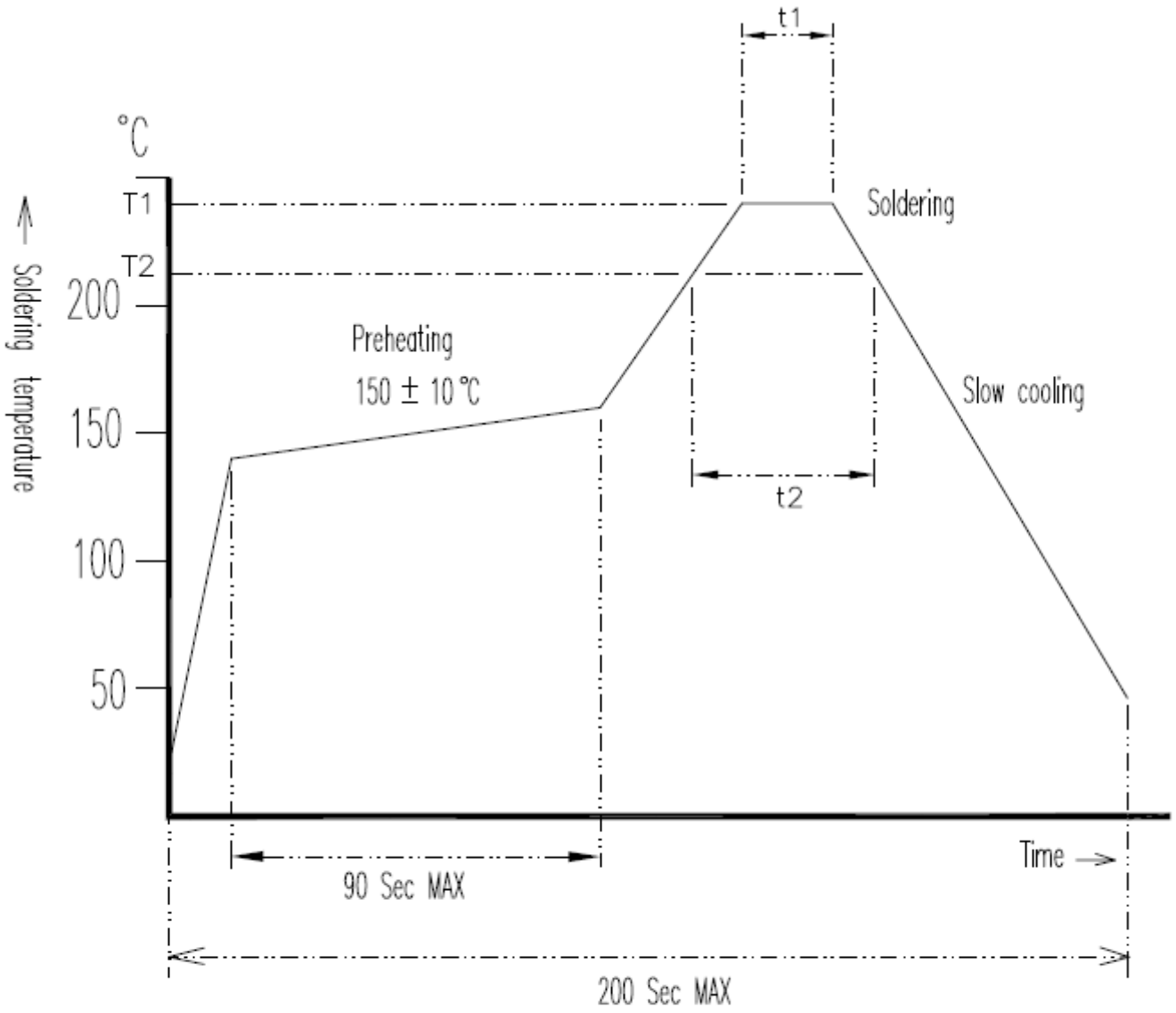


7. Environmentral Performance

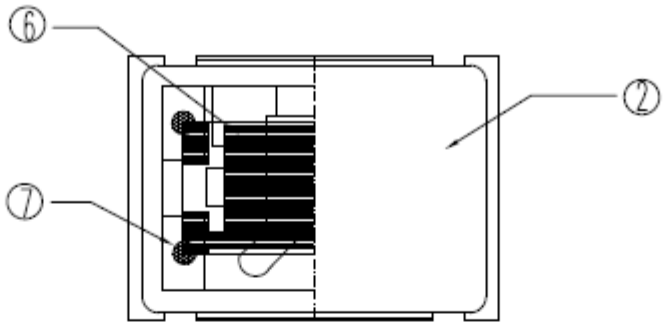
<table>
<tr><th>ITEM</th><th>CONDITION</th><th>SPECIFICATIONS</th></tr>
<tr><td>1. Low temperature storage</td><td>Temp. : -40 ±3℃ Time : 1000 ± 2 H
Measure after leaving a room for 1~2 H</td><td rowspan="4">Frequency stability
△F ：± 5.0 ppm max</td></tr>
<tr><td>2. High temperature storage</td><td>Temp. : +85 ±2℃ Time : 1000 ± 2 H
Measure after leaving a room for 1~2 H</td></tr>
<tr><td>3. Moisture resistance (High temperature and highhumidity storage)</td><td>Temp. : +85 ±2℃ Hum. : 90 ~ 95%RH
Time : 1000 ± 2 H
Measure after leaving a room for 2 hours</td></tr>
<tr><td>4. Shock</td><td>A half sine wave acceleration of 490 m/s2 peak amplitude of
7 to 11 ms duration 3 shock each plane.</td></tr>
<tr><td>5. Damp heat cycle</td><td>Setup temperature and test time as bleow table :
Cycle : 100 cycles
Measure after leaving a room for 2 hour
<table>
<tr><th>Temperature</th><th>Time</th></tr>
<tr><td>Operating Temp. (Low Temp.) +0/-6℃</td><td>30 ± 3 min</td></tr>
<tr><td>Operating Temp. (High Temp.) +4/-0℃</td><td>30 ± 3 min</td></tr>
</table></td><td></td></tr>
</table>

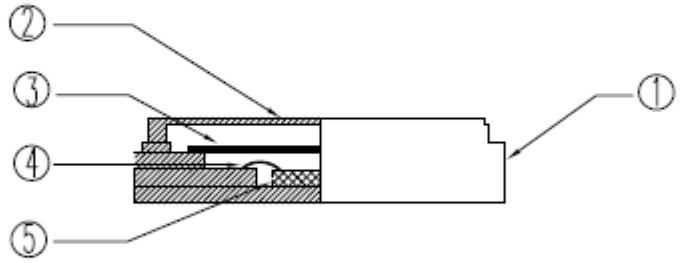
8. Mechanical Performance

6. Solerabilty	Solder bath : +235℃ ± 5℃ Time: 2 ± 0.5 S	The dipping surface of the lead shall be at least 95% covered with a continuous new solder coating.
7. Resistance to soldering heat	Solder bath : +260℃ ± 5℃ Time: 2 ± 0.5 S Reflow chart as attach sheet. (2 Times)	• Shall Be free from any defectiveness on its surface. • Frequency stability △F ： ± 5.0 ppm max
8. Airtight	Solder bath : +260℃ ± 5℃ Time: 2 ± 0.5 S Reflow chart as attach sheet. (2 Times)	Less than 1x1E-8 mbarL/S.
9. Vibration	Frequency ： 10 ~ 55Hz, amplitude (total excursion)： 1.5mm±15%, 3 Direction (X, Y, Z) each 2 H.	Frequency stability △F ： ± 5.0 ppm max
10. Shock	Dropping form 75 cm high 2 times on hard wood.	Same as above.



Application \ Temperature/Time	T1/t1	T2/t2
Lead Free	260±5°C/10 Sec Max	225°C Min/60 Ses Max
Non Lead Free	240±5°C/10 Sec Max	200°C Min/40 Sec Max





PART NAME		MATERIAL	PART NAME		MATERIAL	PART NAME		MATERIAL
1	BASE	CERAMIC	4	WIRE	ALUMINIUM	7	ADHESIVES	SILVER GLUE
2	CAP	CERAMIC	5	IC	Si			
3	BLANK	QUARTZ	6	ELECTRODE	Cr+Ag			