SPECIFICATION

Customer :

Customer P/N : **OS70506A-LVPECL-125.00MHz**

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

TEL：0769-81800088

FAX：0769-81800098

URL HTTP://www.dptel.com

品质部/QUALITY ASSURANCE DEPT

TEL:0769-81800088-833

研发部/R&D DEPT.

TEL:0769-81800088-828

Date :

Approved By:

Checked By:

Designer :

1、 Scope:

1.1	Description:	SMD Crystal Oscillator
1.2	Center Frequency:	125.00MHz
1.3	Dimension & Drawing No:	OS70506A-LVPECL-125.00MHz

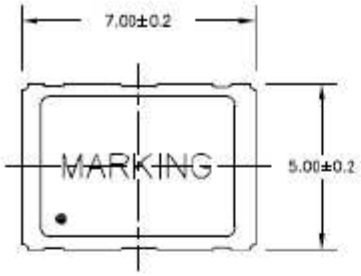
2、 Construction:

2.1 Oscillators series: SMD7×5 XO

3、 Electrical Characteristics

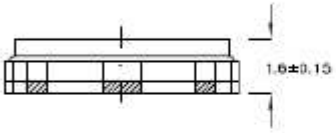
3.1	Nominal Frequency:	125.00MHz	
3.2	Frequency Stability:	≤±50ppm	@ Include Freq. Tolerance, Temp., Supply voltage, Load, aging, shock and vibration.
3.3	Operating Temperature Range:	-40℃to+85℃	
3.4	Storage Temperature Range:	-55℃to+125℃	
3.5	Input Voltage:	+3.3VDC±10%	
3.6	Current Consumption:	≤60mA	
3.7	Output Waveform:	LVPECL	
3.8	Output Symmetry:	45% ~55%	@ measured 50% of waveform
3.9	Rise/Fall Time:	≤850ps	@ measured 20% ~80% of waveform
3.10	Output Voltage $V_{OL:}$	≤Vcc-1.620V	
	$V_{OH:}$	≥Vcc-1.025V	
3.11	Output Load:	50Ω to Vcc-2V	@ output requires termination
3.12	Enable/ Disable	≥0.7Vcc	@Enable
		≤0.3Vcc	@ Disable
3.13	Output Disable delay	≤200ns	
	Output Enable delay	≤10ns	
3.14	Jitter, phase	≤1ps(RMS)	@ 12 kHz ~ 40 MHz frequency band
	Jitter, accumulated	≤7ps(RMS)	@20000 adjacent periods
	Jitter, total	≤40ps(pk-pk)	@1000 random periods

4. Figure



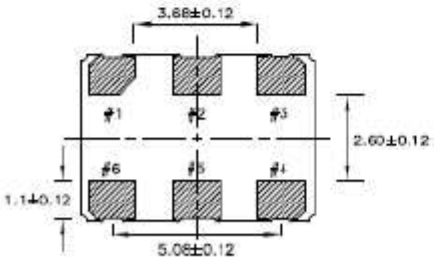
Standard

Terminal	Connection
#1	NC or $\overline{INH}$
#2	NC
#3	GND
#4	OUT
#5	OUTN
#6	+Vcc

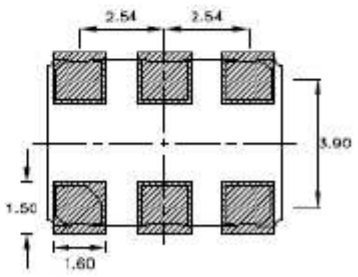


Option

Terminal	Connection
#1	NC
#2	NC or $\overline{INH}$
#3	GND
#4	OUT
#5	OUTN
#6	+Vcc

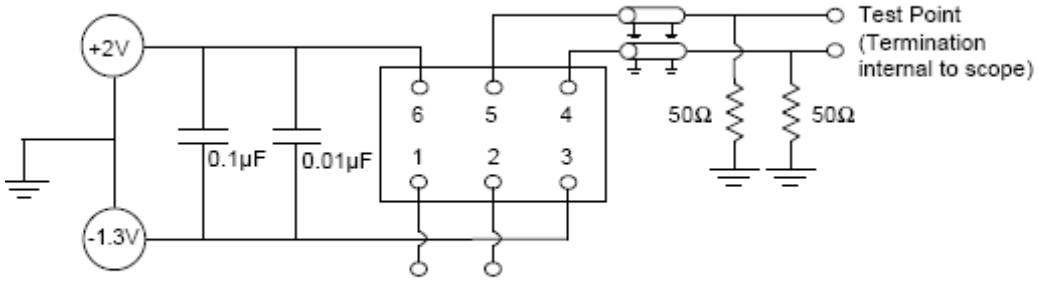


LAND PATTERN (REFERENCE)



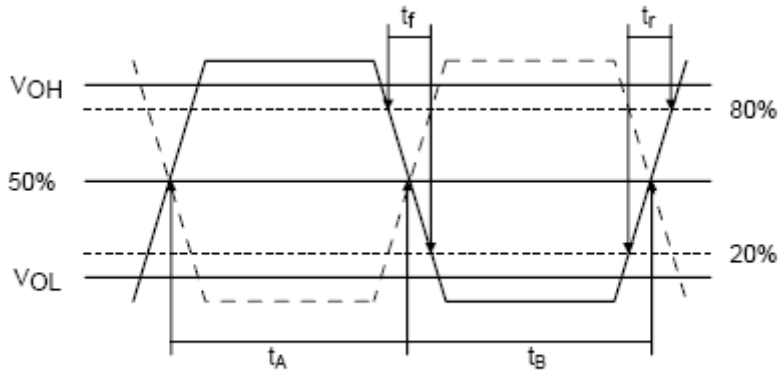
Unit : mm

5. Test circuit



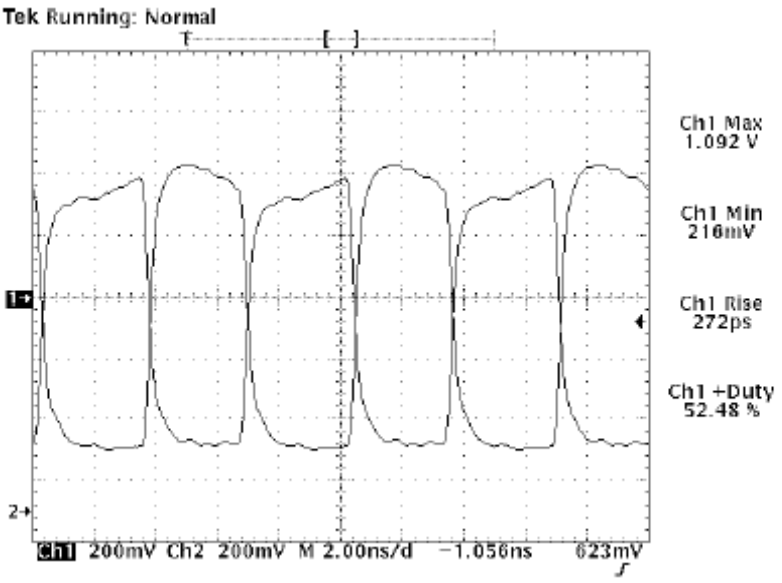
Output Enable/Disable Function
(OE function present on specified pin)

6. Output waveform

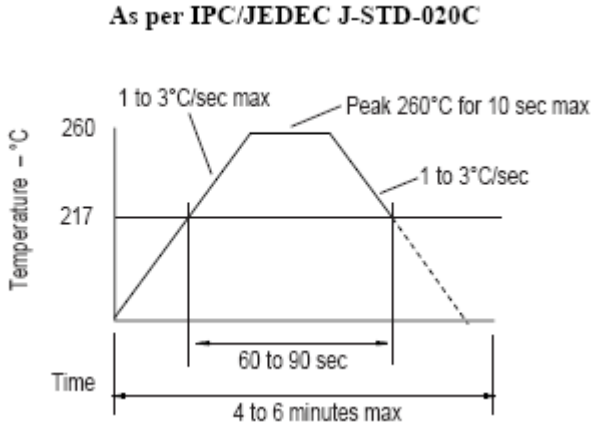


Duty cycle = 100% × (t_A) / (t_A + t_B)

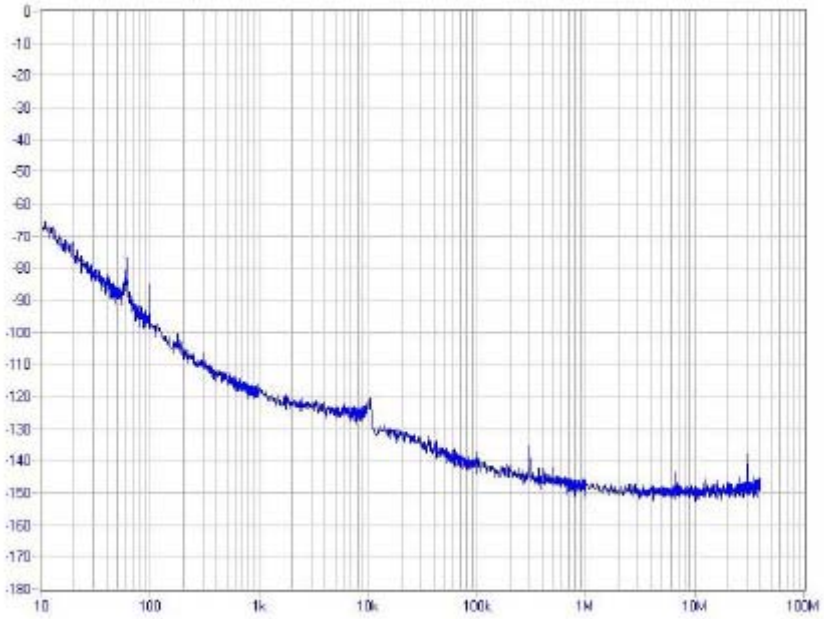
7. Typical Output Waveform



8. Reflow Soldering Profile



9. **Typical Phase Noise**



10. Reliability Test Ratings

This product is rated to meet the following test conditions:

Mechanical	**Shock**	**MIL-STD-883, Method 2002, Condition B**
Mechanical	**Solder ability**	**MIL-STD-883, Method 2003**
Mechanical	**Terminal strength**	**MIL-STD-883, Method 2004, Condition D**
Mechanical	**Gross leak**	**MIL-STD-883, Method 1014, Condition C**
Mechanical	**Fine leak**	**MIL-STD-883, Method 1014, Condition A2 ($R_1 = 2x10^{-8}$ atm cc/s)**
Mechanical	**Solvent resistance**	**MIL-STD-202, Method 215**
Environmental	**Thermal shock**	**MIL-STD-883, Method 1011, Condition A**
Environmental	**Moisture resistance**	**MIL-STD-883, Method 1004**
Environmental	**Vibration**	**MIL-STD-883, Method 2007, Condition A**
Environmental	**Resistance to soldering heat**	**MIL-STD-202, Method 210, Condition I or J**