



SPECIFICATION

Customer : _____

Customer P/N : **OS70506 A PECL-156.25MHz**

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

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URL [HTTP://www.dptel.com](http://www.dptel.com)

Date : _____

Approved By: _____

品质部/QUALITY ASSURANCE DEPT

TEL:0769-81800088-833

Checked By: _____

研发部/R&D DEPT.

TEL:0769-81800088-828

Designer : _____

1、 Scope:

- | | | |
|-----|-------------------------|--------------------------|
| 1.1 | Description: | SMD Crystal Oscillator |
| 1.2 | Center Frequency: | 156.25MHz |
| 1.3 | Dimension & Drawing No: | OS70506 A PECL-156.25MHz |

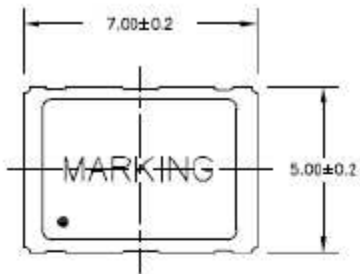
2、 Construction:

- 2.1 Oscillators series: SMD7×5 XO

3、 Electrical Characteristics

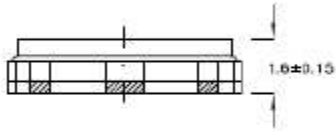
- | | | |
|------|------------------------------|---|
| 3.1 | Nominal Frequency: | 156.25MHz |
| 3.2 | Frequency Stability: | ≤±50ppm @ Include Freq. Tolerance, Temp., Supply voltage, Load, aging, shock and vibration. |
| 3.3 | Operating Temperature Range: | 0°C to +70°C |
| 3.4 | Storage Temperature Range: | -55°C to +125°C |
| 3.5 | Input Voltage: | +3.3VDC ±10% |
| 3.6 | Current Consumption: | ≤60mA |
| 3.7 | Output Waveform: | PECL |
| 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} : | ≤ $V_{CC}-1.620V$ |
| | V_{OH} : | ≥ $V_{CC}-1.025V$ |
| 3.11 | Output Load: | 50Ω to $V_{CC}-2V$ @ output requires termination |
| 3.12 | Enable/ Disable | ≥0.7 V_{CC} @ Enable |
| | | ≤0.3 V_{CC} @ 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



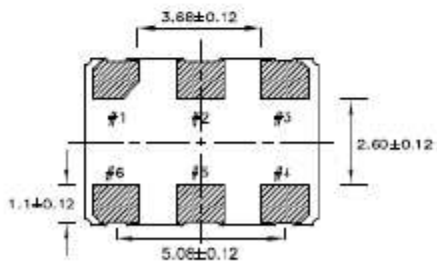
Standard

| Terminal | Connection |
|----------|------------|
| #1 | NC or INH |
| #2 | NC |
| #3 | GND |
| #4 | OUT |
| #5 | OUTN |
| #6 | +Vcc |

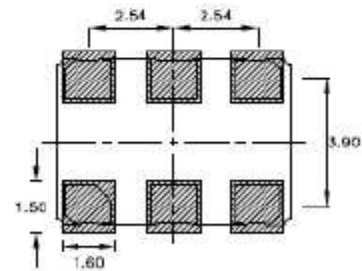


Option

| Terminal | Connection |
|----------|------------|
| #1 | NC |
| #2 | NC or INH |
| #3 | GND |
| #4 | OUT |
| #5 | OUTN |
| #6 | +Vcc |

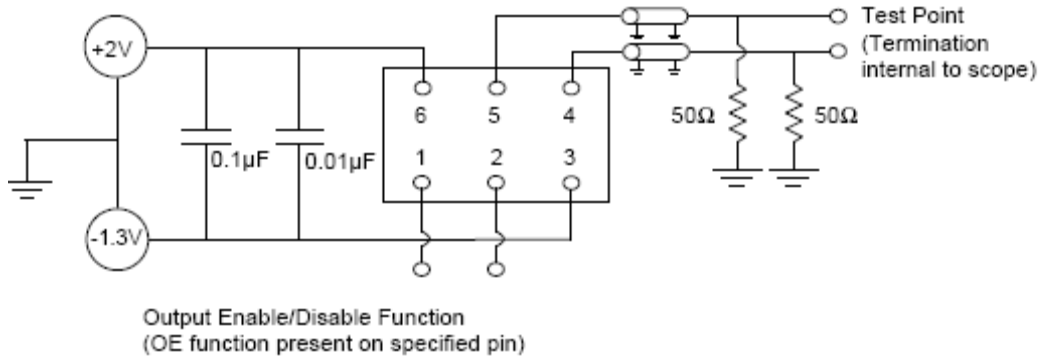


LAND PATTERN (REFERENCE)

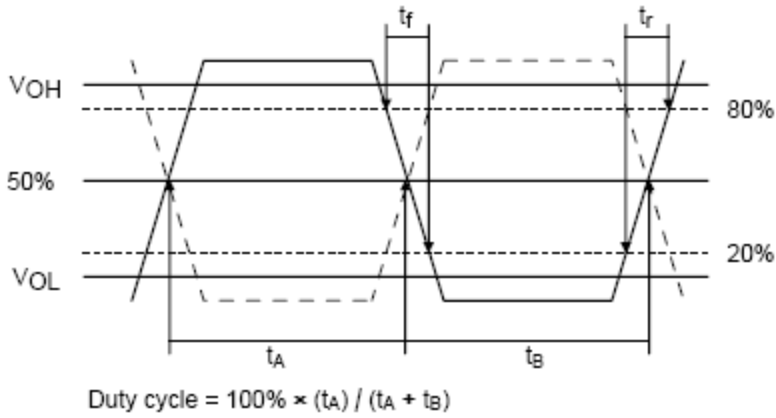


Unit : mm

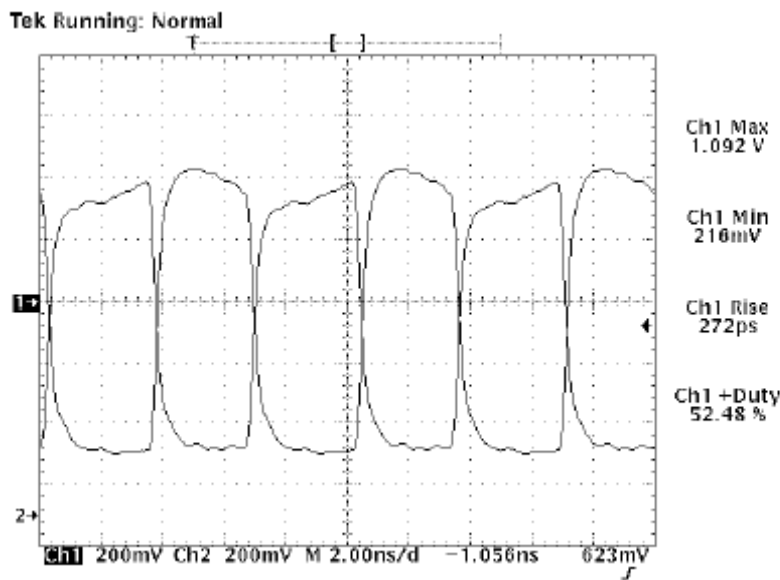
5. Test circuit



6. Output waveform

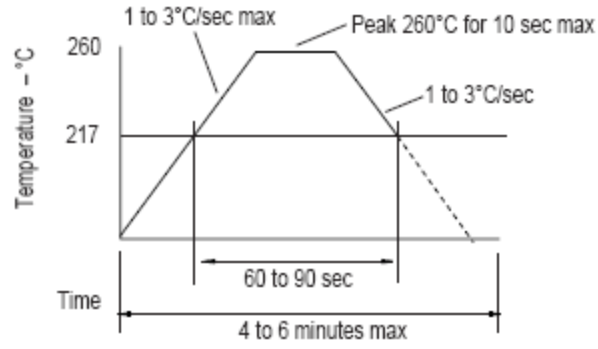


7. Typical Output Waveform

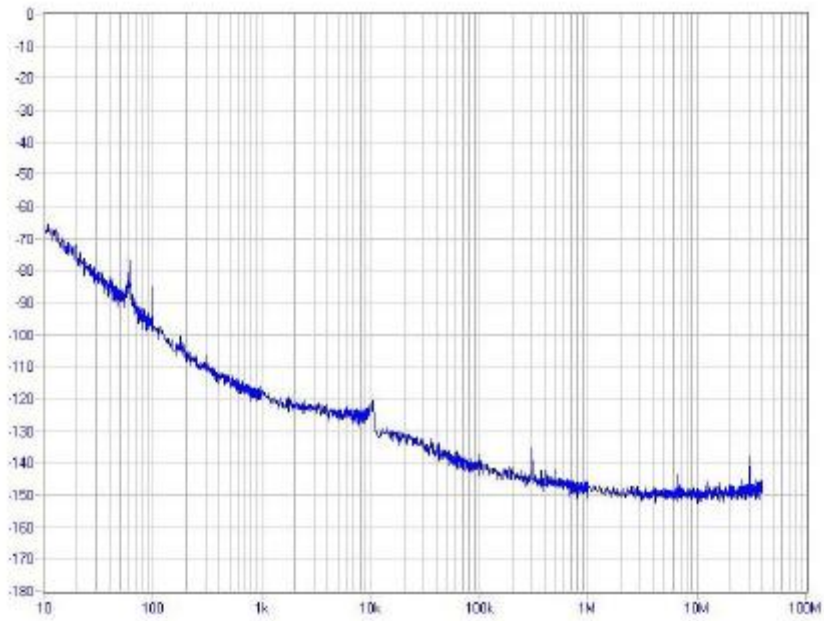


8. Reflow Soldering Profile

As per IPC/JEDEC J-STD-020C



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 ($R_1 = 2 \times 10^{-8}$ 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 |