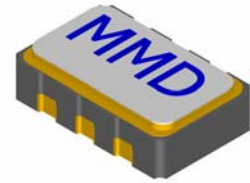


MMUL Series – 5 x 3.2 Custom Oscillator



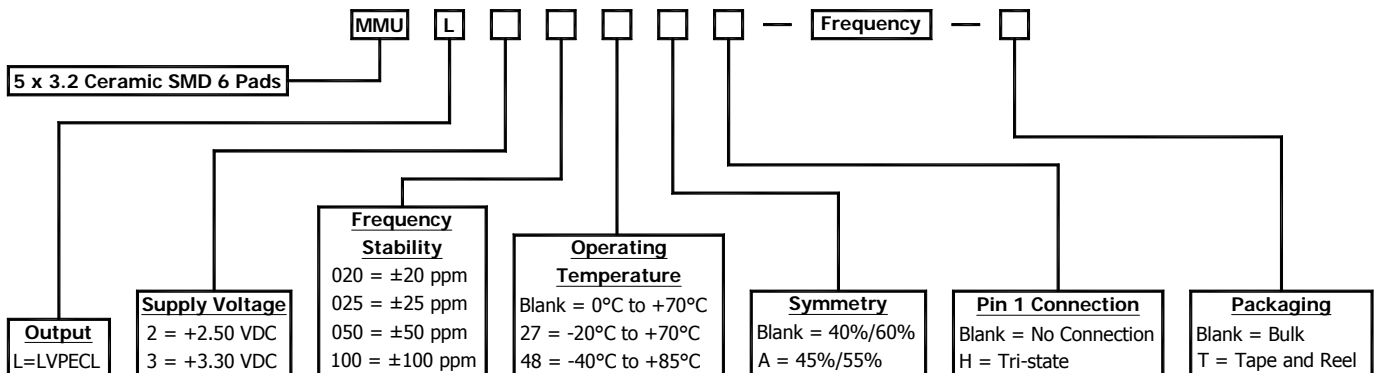
- 5 X 3.2 SMT Package – 6 Pins
- LVPECL Output
- Tri-state Function
- RoHS Compliant
- Tape and Reel Packing Available



ELECTRICAL SPECIFICATION:

| | |
|--|--|
| Frequency Range | 74.250MHZ to 161.1328MHZ |
| Temperature Stability (Inclusive of Temperature, Load, Voltage, and Aging) | (See Part Number Guide for Options) |
| Operating Temperature Range | (See Part Number Guide for Options) |
| Storage Temperature Range | -55°C to +125°C |
| Supply Voltage (V _{dd}) ±5% | +2.50 VDC |
| Supply Current | 75mA max |
| Output | LVPECL |
| Logic "0" | 1.43 VDC typ, 1.60 VDC max |
| Logic "1" | 1.10 VDC typ, 0.90 VDC min |
| Load | 50Ω into V _{dd} -2.0VDC |
| Symmetry (50% of waveform) | (See Part Number Guide for Options) |
| Rise/Fall Time (20% to 80%) | 300p Sec typ, 700pSec max |
| RMS Phase Jitter (12kHz to 20MHZ) | 1pSec max |
| Phase Noise | 100 Hz -95 dBc/Hz 1 kHz -125 dBc/Hz 10 kHz -143 dBc/Hz 100 kHz -146 dBc/Hz |
| Start-up Time | 10mSec max |
| Tri-state Operation | Voh = 70% of Vdd min or No Connection to Enable Output Vol = 30% max or grounded to Disable Output (High Impedance) |

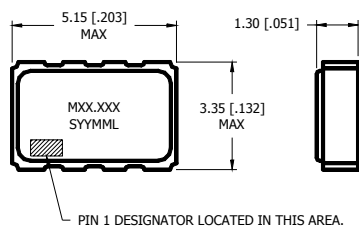
PART NUMBER GUIDE:



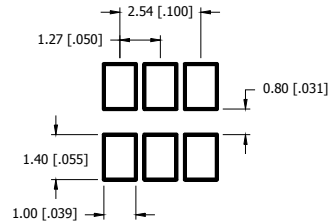
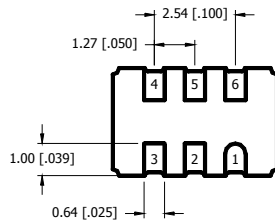
Please Consult with MMD Sales Department for any other Parameters or Options

MECHANICAL DIMENSIONS:

MMD Components, 30400 Esperanza, Rancho Santa Margarita, CA, 92688
 Phone: (949) 709-5075, Fax: (949) 709-3536, www.mmdcomp.com
 Sales@mmdcomp.com



DIMENSION IN BRACKETS ARE IN INCHES
EXTERNAL BYPASS CAPACITOR IS RECOMMENDED



RECOMMENDED
LAND PATTERN

| PIN CONNECTIONS | |
|-----------------|----------------------|
| PIN 1 | TRI-STATE |
| PIN 2 | NO CONNECTION |
| PIN 3 | CASE GROUND |
| PIN 4 | OUTPUT |
| PIN 5 | COMPLEMENTARY OUTPUT |
| PIN 6 | SUPPLY VOLTAGE |

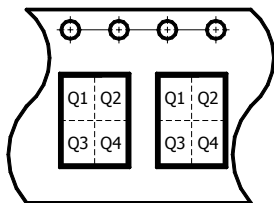
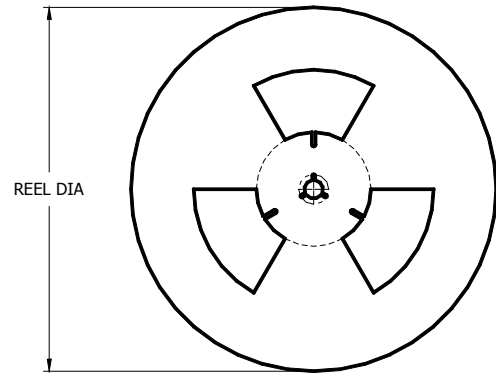
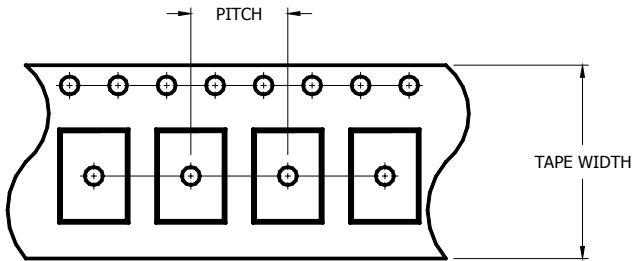
ENVIRONMENTAL/MECHANICAL SPECIFICATION:

MARKING DETAIL:

| | |
|-----------------|--------------------------------|
| Shock | MIL-STD-883, Meth 2002, Cond B |
| Solderability | MIL-STD-883, Meth 2003 |
| Vibration | MIL-STD-883, Meth 2007, Cond A |
| Gross Leak Test | MIL-STD-883, Meth 1014, Cond C |
| Fine Leak Test | MIL-STD-883, Meth 1014, Cond A |
| Reflow Solder | +260°C for 10 sec max |

| |
|------------------------------|
| Line 1: MXX.XXX |
| XX.XXX = Frequency in MHz |
| |
| Line 2: SYMCCL |
| S = Internal Code |
| YM = Date Code (Year/Month) |
| CC = Crystal Parameters Code |
| L = Denotes RoHS Compliant |

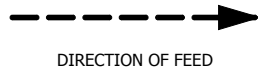
TAPE AND REEL DIMENSIONS:



| | |
|---------------|-------------|
| PITCH | 8.0 [.315] |
| TAPE WIDTH | 16.0 [.630] |
| REEL DIA | 330 [13 IN] |
| QTY PER REEL | 1000 |
| PIN 1 ORIENT. | Q1 |

NOTES: UNLESS OTHERWISE SPECIFIED

- Applicable Standards / Specifications
ANSI Y14.5M, Dimensions and Tolerances
EIA-481-B, 8 mm through 200mm Embossed Carrier Taping and 8 mm and 12 mm Punched Carrier Taping of Surface Mount Components for Automatic Handling.
- Dimensions are in millimeters [inches].
- Tolerances are ± 0.1 [.004] unless otherwise specified.
- Do not scale drawing.



DIRECTION OF FEED

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