MUL Series 5X3.2 Ceramic SMD Oscillator

- **5 x 3.2 SMD Package 6 Pin**
- **LVPECL Output**
- **Tristate Option**
- **Tape & Reel Packaging Available**



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%	(See Part Number Guide for Options)
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)

Mechanical & Environmental Detail

Shock	MIL-STD-883, Method 2002 Cond B
Solderability	MIL-STD-883, Method 2003
Vibration	MIL-STD-883, Method 2007, Cond A
Gross Leak Test	MIL-STD-883, Method 1014, Cond C
Fine Leak Test	MIL-STD-883, Method 1014, Cond A2
Reflow Solder	+260°C for 10 sec max

Marking Detail

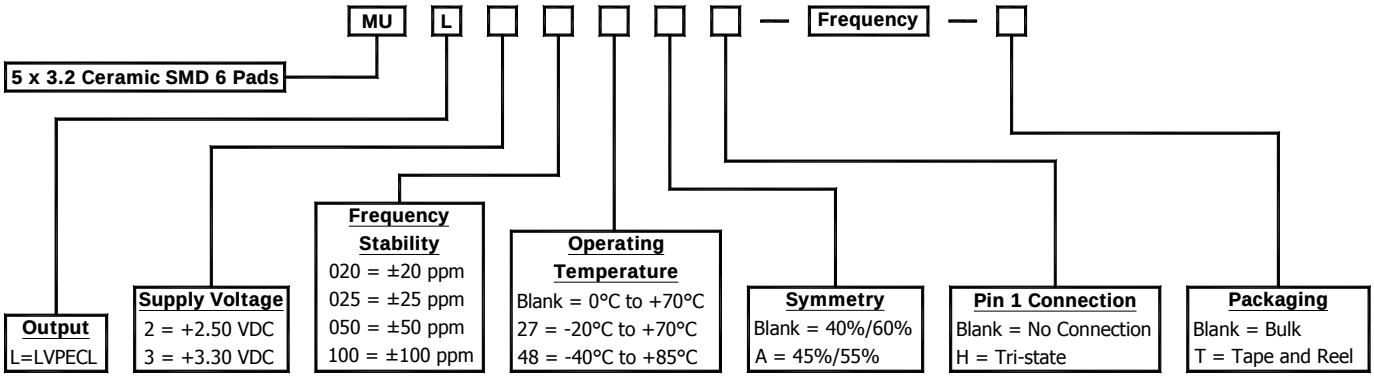
Line 1 = MXXXXX		
M	=	MMD
XXXXX	=	Frequency in MHZ
Line 2 = SYYWWL		
S	=	Internal Code
YYWW	=	4 Digit Date Code (Year / Week)
L	=	Denotes RoHS Compliant
Line 3 = XXXXX		
Internal use only		
May vary with lots		
Black dot to denote Pin 1		

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

RoHS Compliant Lead Free

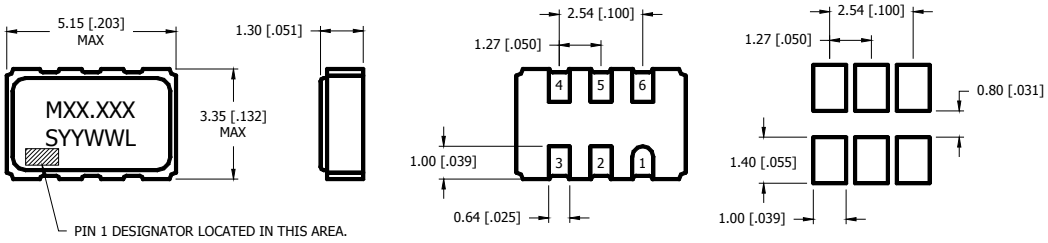
Revision:	08/17/11 B

Part Number Guide



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

Mechanical Details

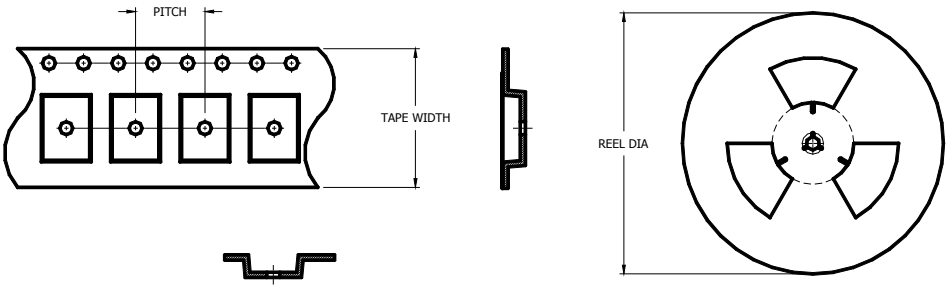


DIMENSION IN BRACKETS ARE IN INCHES
EXTERNAL BYPASS CAPACITOR IS RECOMMENDED

RECOMMENDED
LAND PATTERN

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

Tape & Reel Dimensions



DIRECTION OF FEED

PITCH	8.00 [.315]
TAPE WIDTH	16.00 [.630]
REEL DIA	180[7 IN]
QTY PER REEL	1000
PIN 1 ORIENT.	Q1

NOTES: UNLESS OTHERWISE SPECIFIED
1. 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.
2. Dimensions are in millimeters.
3. Tolerances are ±0.10 [.004] mm unless otherwise specified.
4. Do not scale drawing.

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