MTDS Series – 5 x 7 Ceramic SMD TCXO

- **Low Profile SMD TCXO**
- **Clipped Sinewave Output**
- **RoHS Compliant**
- **Low Power Consumption**

ELECTRICAL SPECIFICATIONS:

Frequency Range	9.600MHZ to 27.000MHZ	
Frequency Stability vs Temperature *	(See Frequency Stability vs Temperature Table)	
Operating Temperature Range	(See Frequency Stability vs Temperature Table)	
Storage Temperature Range	-40°C to +85°C	
Output Type	Clipped Sinewave	
Supply Voltage	+3.30 VDC ±5%	+5.00 VDC ±5%
Supply Current	2.0mA max	2.0mA max
Control Voltage	+1.65 VDC ±1.50 VDC Positive Slope	+2.50 VDC ±2.00 VDC Positive Slope
Output Level	0.8 Vp-p min	1.0 Vp-p min
Output Load	10 kΩ // 10pF	10 kΩ // 10pF

Pin 1	
No Connection	No Connection
Vc Option	±10 ppm min

* Inclusive of Temperature., Load, Voltage and Aging

PART NUMBER GUIDE:

MTD S ☐ ☐ ☐ ☐ — Frequency — ☐

5 x 7 SMD TCXO

Output
S = Clipped Sinewave

Supply Voltage
3 = +3.3 VDC
5 = +5.0 VDC

Frequency Stability
15 = ±1.5 ppm
20 = ±2.0 ppm
25 = ±2.5 ppm
30 = ±3.0 ppm
35 = ±3.5 ppm
50 = ±5.0 ppm

Operating Temperature
A = 0°C to +50°C
B = -10°C to +60°C
C = -20°C to +70°C
D = -30°C to +70°C
E = -30°C to +80°C
F = -40°C to +85°C
G = 0°C to +70°C

Pin 1 Connection
Blank = No Connect
V = Voltage Control

Packaging
Blank = Bulk
T = Tape and Reel

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

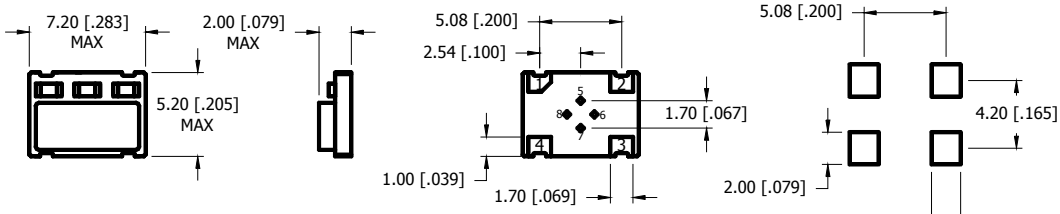
MMD Components, 30400 Esperanza, Rancho Santa Margarita, CA, 92688
Phone: (949) 709-5075, Fax: (949) 709-3536, www.mmdcomp.com
Sales@mmdcomp.com

FREQUENCY STABILITY vs TEMPERATURE TABLE:

Code	Stability	15	20	25	30	35	50
	Temp	±1.5ppm	±2.0ppm	±2.5ppm	±3.0ppm	±3.5ppm	±5.0ppm
A	0°C TO +50°C	●	●	●	●	●	●
G	0°C TO +70°C	☐	●	●	●	●	●
C	-20°C TO +70°C	☐	☐	●	●	●	●
D	-30°C TO +70°C	☐	☐	●	●	●	●
E	-30°C TO +80°C	☐	☐	●	●	●	●
F	-40°C TO +85°C	☐	☐	☐	●	●	●

● = Available ☐ = Consult with the Manufacturer

MECHANICAL DIMENSIONS:



DIMENSIONS IN BRACKETS ARE IN INCHES
EXTERNAL BYPASS CAPACITOR IS RECOMMENDED

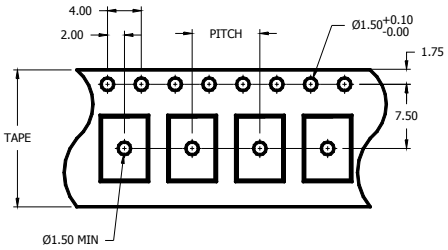
RECOMMENDED LAND PATTERN

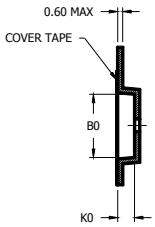
PIN 1	VC OR N/C
PIN 2	GROUND
PIN 3	OUTPUT
PIN 4	SUPPLY VOLTAGE
PIN 5-8 FACTORY TEST TERMINALS (DO NOT USE)	

ENVIRONMENT / MECHANICAL:

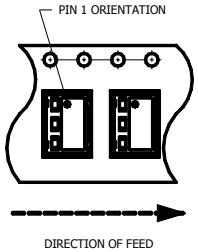
Shock	MIL-STD-883, Method 2002, Condition B
Solderability	MIL-STD-883, Method 2003
Vibration	MIL-STD-883, Method 2007, Condition A

TAPE and DIMENSIONS:





A0	5.4
BO	7.4
K0	2.0
PITCH	8.0
TAPE	16.0
REEL	330 [13 IN]



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 ±0.1 mm unless otherwise specified.
4. Do not scale drawing.

MARKING:

Line 1 =MXXXXX
M = MMD COMPONENTS
XXXXX = Frequency in MHZ

Line 2 = SYYMML
S = Internal Code
YYMM = 4 Digit Date Code (Year / Month)
L = Denotes RoHS Compliant

Line 3 = XXXXX
Internal use only
May vary with lots

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