



2.0 mm x 2.5 mm Ceramic Package SMD TCXO



I583/I783 Series

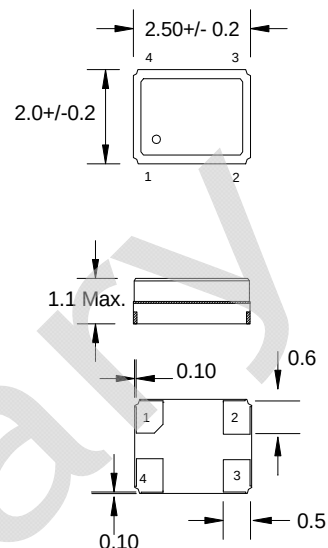
Product Features:

Low Current Consumption
Ultra Miniature Package
RoHS Compliant
Compatible with Leadfree Processing

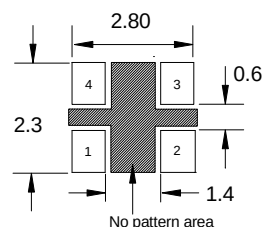
Applications:

Server & Storage
CDMA/WCDMA
802.11 / Wifi
T1/E1, T3/E3

Frequency	(Contact Sales Channel for other available frequencies)
Output Level Clipped Sinewave	0.8 V p-p Min.
Output Load Clipped Sinewave	10K Ohms / 10 pF
Frequency Stability Vs Temperature Vs Voltage Vs Load(5%)	See Frequency Stability Table ± 0.2 ppm Max. ± 0.2 ppm Max.
Frequency Tolerance @ 25° C	± 2.0 ppm (After 2 nd Reflow)
Aging	± 1 ppm / Year Max.
Supply Voltage	See Supply Voltage Table , tolerance $\pm 5\%$
Current	2.0 mA Max.
Voltage Control (I783)	1.5 VDC ± 1.0 VDC, ± 5.0 ppm Min. (Custom Available)
Operating	See Operating Temperature Table
Storage	-40° C to +85° C
Harmonics	-8.0 dBc Max.
Phase Noise	-130 dBc/Hz @ 1KHz



Recommended Pad Layout



Pin Connection
1 Vcontrol / N.C.
2 GND
3 Output
4 Vcc

Dimension Units: mm

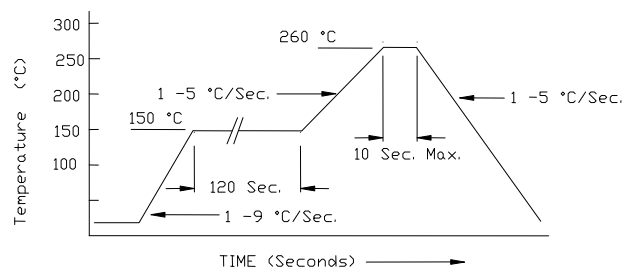
Part Number Guide		Sample Part Number: I583-5P8-26.000 Mhz		
Package	Operating Temperature	Frequency Stability vs Temperature	Supply Voltage	Frequency
I583 (Clipped Sinewave TCXO) I783 (Clipped Sinewave TCVCXO)	7 = 0° C to +50° C	P = ± 2.0 ppm	3 = 3.3 V	- 26.000 MHz
	1 = 0° C to +70° C	Q = ± 2.5 ppm	7 = 3.0 V	
	3 = -20° C to +70° C	R = ± 3.0 ppm	8 = 2.8 V	
	5 = -30° C to +85° C	J = ± 5.0 ppm	2 = 2.7 V	
			1 = 1.8 V	

NOTE: A 0.01 μ F bypass capacitor is recommended between Vcc (pin 4) and GND (pin 2) to minimize power supply noise.

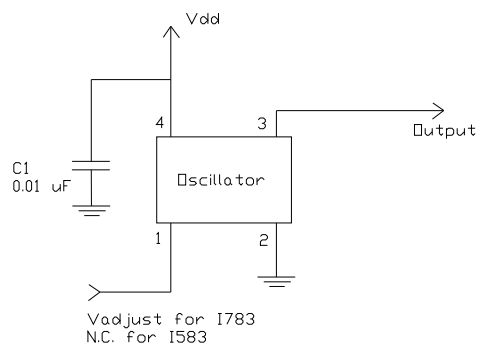
** Not available for all temperature ranges.

Pb Free Solder Reflow Profile:

Typical Application:



*Units are backward compatible with 240C reflow processes

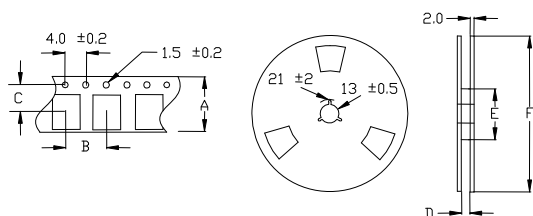


Package Information:

MSL = N.A. (package does not contain plastic, storage life is unlimited under normal room conditions).

Termination = e4 (Au over Ni over W base metalization).

Tape and Reel Information:



Quantity per Reel	3000
A	8 +/- .3
B	4 +/- .2
C	3.5 +/- .2
D	9 +/- 1 or 12 +/- 3
E	60 / 80
F	180

Environmental Specifications

Thermal Shock	MIL-STD-883, Method 1011, Condition A
Moisture Resistance	MIL-STD-883, Method 1004
Mechanical Shock	MIL-STD-883, Method 2002, Condition B
Mechanical Vibration	MIL-STD-883, Method 2007, Condition A
Resistance to Soldering Heat	J-STD-020C, Table 5-2 Pb-free devices (except 2 cycles max)
Hazardous Substance	Pb-Free / RoHS / Green Compliant
Solderability	JESD22-B102-D Method 2 (Preconditioning E)
Terminal Strength	MIL-STD-883, Method 2004, Test Condition D
Gross Leak	MIL-STD-883, Method 1014, Condition C
Fine Leak	MIL-STD-883, Method 1014, Condition A2, R1=2x10 ⁻⁸ atm cc/s
Solvent Resistance	MIL-STD-202, Method 215

Marking

Line 1: XXXX(Freq.Code,Production Code,Year, Month,Date) (Example="GB17L")

Line 2: XXXXX (Crystal Code)