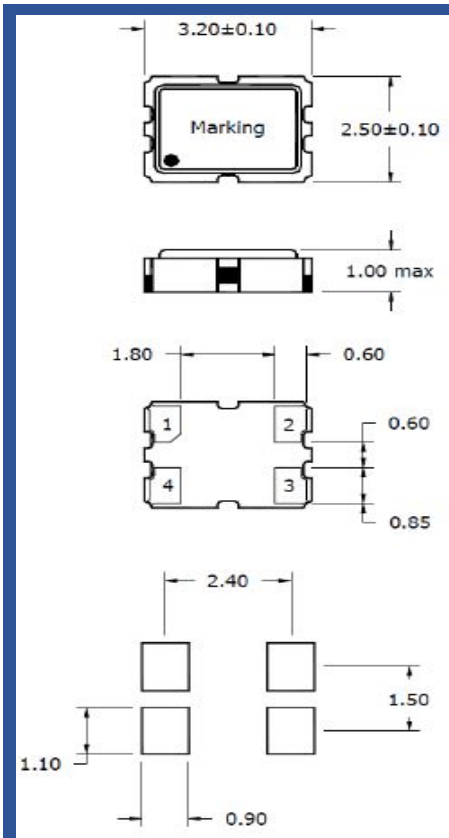
Product Features:

Clipped Sinewave
Analog Compensation
Available ±0.5ppm Stability
RoHS Compliant / Pb-free

Applications:

GPS
Smart Meters
Wireless Base Stations
Sonet / SDH
T1/E1, T3/E3

Frequency	10MHz to 52MHz
Frequency Tolerance @ 25° C	±2.0ppm after second reflow
Frequency Stability Vs Temperature Vs Supply Voltage (± 5%) Vs Load (10%)	 See Part Numbering Guide ±0.2ppm Maximum ±0.2ppm Maximum
Output Level Clipped Sinewave	 0.8 V p-p Minimum
Output Load Clipped Sinewave	 10K Ohms / 10 pF
Start Time (90% of Vp-p)	3.0mSec Maximum
Aging	±1 ppm / Year Maximum.
Supply Voltage	See Part Numbering Guide, tolerance ± 5%
Current ≤32MHz >32mHz	 1.5mA Maximum 2.0mA Maximum
Voltage Control	1.5 Vdc ± 1.0 Vdc, ± 5.0 ppm Minimum (Only for I747)
Operating Temperature Range	See Part Numbering Guide
Storage Temperature Range	-40°C to +85°C
Phase Noise (typical)	-87 dBc/Hz @ 10 Hz -112 dBc/Hz @ 100 Hz -135 dBc/Hz @ 1KHz -145 dBc/Hz @ 10 KHz



Suggested Land Pattern

Pin Connections		
Pin 1	I547	Ground or No Connect
	I747	Control Voltage
Pin 2	Ground	
Pin 3	Output	
Pin 4	Supply Voltage	

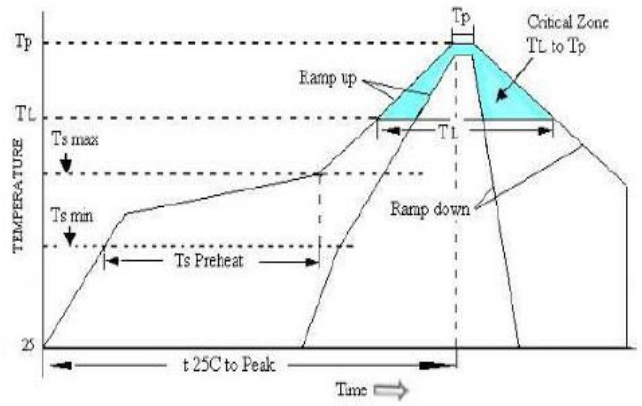
Dimension Units: mm

Part Number Guide		Sample Part Number: I547-1Q3-20.000 MHz		
Package	**Operating Temperature**	**Frequency Stability vs Temperature**	**Supply Voltage**	**Frequency**
I547 (Clipped Sinewave TCXO) I747 (Clipped Sinewave TCVCXO)	7 = 0°C to +50°C	*,**Y = ±0.5ppm	3 = 3.3V	-20.000 MHz
	1 = 0°C to +70°C	*N = ±1.0ppm	7 = 3.0V	
	3 = -20°C to +70°C	*O = ±1.5ppm	8 = 2.8V	
	5 = -30°C to +85°C	*P = ±2.0ppm	2 = 2.7V	
	2 = -40°C to +85°C	Q = ±2.5 ppm	1 = 1.8V	
		R = ±3.0 ppm		
		J = ±5.0 ppm		

** Not available for all frequencies or temperature ranges.
** Referenced to the midpoint between minimum and maximum frequency value over operating Temperature Range.

NOTE: It is recommended that a 0.01µF bypass capacitor be connected between Vdd (Pin 4) and Ground (Pin 2) to minimize power supply noise.
It is recommended that an external 0.01µF AC-coupling capacitor be connected to output (Pin 3) of the device.
For the TXCO (I547), it is recommended that Pin 1 should not be left floating but be connected to Ground.

Pb Free Solder Reflow Profile:



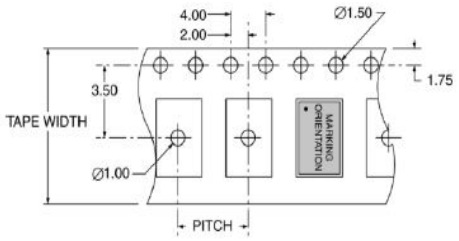
Ts max to T_L (Ramp-up Rate)	3ºC / second max
Preheat Temperature min (Ts min) Temperature typ (Ts typ) Temperature max (Ts max) Time (Ts)	 150ºC 175ºC 200ºC 60 to180 seconds
Ramp-up Rate (T_L to Tp)	3ºC / second max
Time Maintained Above Temperature (T_L) Time (TL)	 217ºC 60 to 150 seconds
Peak Temperature (Tp)	260ºC max for 10 seconds
Time within 5ºC to Peak Temperature (Tp)	20 to 40 seconds
Ramp-down Rate	6ºC / second max
Tune 25ºC to Peak Temperature	8 minutes max

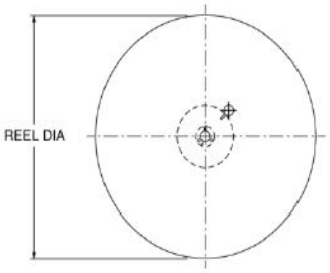
*Units are backward compatible with 240C reflow processes

Package Information:

MSL = 1 (package does not contain plastic, storage life is unlimited under normal room conditions).
Termination = e4 (Au over Ni over W base metallization).

Tape and Reel Information:





PITCH	4.00
TAPE WIDTH	8.00
REEL DIA	180
QTY PER REEL	3,000