# **I537** Series



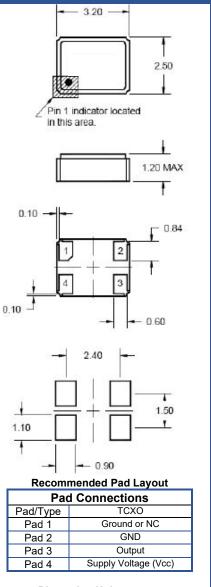
## **Product Features:**

тсхо Low Jitter, Non-PLL Based Output **Clipped Sinewave Output** Compatible with Leadfree Processing Digital Compensation

## **Applications:**

Wireless Communication Test Instruments GPS Base stations Telecommunications

Frequency	8.000 MHz to 40.000 MHz	
Output Level		
Clipped Sinewave	0.8 Vp-p Min.	
Output Load	10K Ohms // 10 pF	
Frequency Stability		
Vs Temperature	Saa Fraguanay Stability Tabla	
Vs Voltage (±5%)	See Frequency Stability Table ±0.3 ppm Max.	
Vs Voltage (±5%) Vs Load (±5%)	±0.2 ppm Max.	
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Frequency Tolerance @ 25° C	±1.0 ppm Max.	
Aging @ 25° C	±1 ppm / Year Max.	
Supply Voltage	See Supply Voltage Table, Tolerance ± 5%	
Current	2.0 mA Max.	
Operating	See Operating Temperature Table	
Storage	-40° C to +85° C	
Phase Noise		
	U	
(Typ. @ 20Mhz)	-115 dBc/Hz @ 100 Hz	
	-138 dBc/Hz @ 1KHz	
	-146 dBc/Hz @ 10KHz	



**Dimension Units: mm** 

Part Number Guide		Sample Part Number: I537-1Q3- 20.000 MHz		
Package	Operating Temperature	Frequency Stability vs Temperature	Supply Voltage	Frequency
I537 (Clipped Sinewave TCXO)	7 = 0°C to +50°C	**N = ±1.0 ppm	2 = 2.7 V	- -20.000 MHz
	1 = 0°C to +70°C	**O = ±1.5 ppm	3 = 3.3 V	
	3 = -20°C to +70°C	P = ±2.0 ppm	6 = 2.5 V	
	5 = -30°C to +85°C	Q = ±2.5 ppm	7 = 3.0 V	
	2 = -40°C to +85°C	R = ±3.0 ppm	8 = 2.8 V	
		J = ±5.0 ppm		

NOTE:

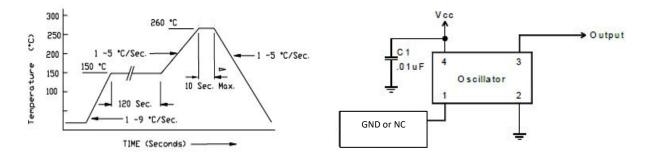
A 0.01 µF bypass capacitor is recommended between Vcc (pin 4) and GND (pin 2) to minimize power supply noise. \*\* Not available for all operating temperature ranges and output frequencies.

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# **Pb Free Solder Reflow Profile:**

**Typical Application:** 

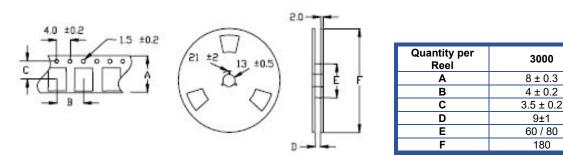


\*Units are backward compatible with 240C reflow processes

#### **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 metallization).

## **Tape and Reel Information:**



#### **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

9±1

180

# **Mouser Electronics**

Authorized Distributor

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ABRACON:

<u>I537-207- 32.000 MHz</u> <u>I537-5N7-26.000MHz</u>