

M6027 & M6028 Series

3.2 x 5 mm, 3.0 Volt, Clipped Sinewave, TCXO/TCVCXO

- Ultra-miniature size
- Ideal for handheld and portable devices



Ordering Information

M6027/M6028 1 H F S N 00.0000 MHz

Product Series
M6027 = TCXO
M6028 = TCVCXO

Temperature Range
1: 0°C to +70°C 6: -20°C to +70°C
8: 0°C to +50°C A: -10°C to +60°C
F: -30°C to +75°C

Stability
H: ±2.5 ppm L: ±5 ppm

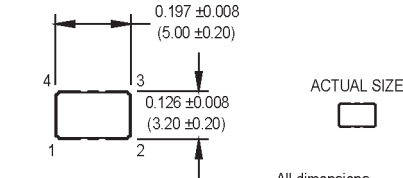
Frequency Control
F: Fixed for TCXO
V: Voltage Tuned for TCVCXO

Output Type
S: Clipped Sinewave

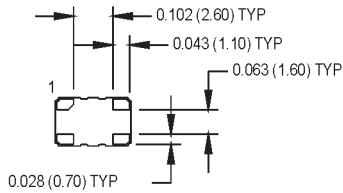
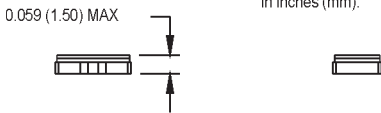
Package/Lead Configurations
N: Leadless

Frequency (customer specified)

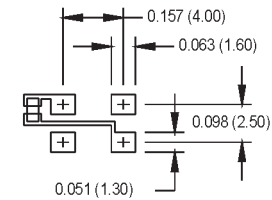
M6027Sxxx & M6028Sxxx - Contact factory for datasheets.



All dimensions in inches (mm).



SUGGESTED SOLDER PAD LAYOUT



Pin Connections

PIN	FUNCTION
1	N/C or Control Voltage
2	Ground/Case
3	Output
4	+Vdd

	PARAMETER	SYMBOL	UNITS	
Electrical Specifications	Frequency Range	F	12.6 to 26 MHz	
	Frequency Stability Over Operating Temperature	?F/F	(See Ordering Information)	
	Frequency Vs. Supply Voltage		±0.3 Max. ppm	
	Frequency Vs. Aging		±1.0/year max @ +25°C Ppm	
	Input Voltage	V _{dd}	+3.0 ±5% V	
	Input Current	I _{dd}	2 Max. mA	
	Output Type		Clipped Sinewave	
	Output Level		0.8 pk-pk min. V	
	Output Load		10K 10pF	
	Frequency Tuning		±5 to ±15 over control voltage range ppm (M6028 only)	
	Control Voltage	V _c	1.5 ±1.0 V (M6028 only)	
	Phase Noise (Typical)	10 Hz -80	100 Hz 1 kHz 10 kHz -110 -130 -145	dBc/Hz
	Environmental	Mechanical Shock		Per MIL-STD-202, Method 213, Condition C
		Vibration		Per MIL-STD-202, Method 201 & 204
Max Soldering Conditions			See Solder Profile, Figure 1	
Hermeticity			Per MIL-STD-202, Method 112 (1x10 ⁻⁸ atm.cc/s of helium)	
Solderability			Per EIAJ-STD-002	

Clipped Sinewave Load – see load circuit diagram #7

MtronPTI Lead Free Solder Profile

