

Low Power 2.5 x 3.2 SMD Oscillator

ISM46 Series

Product Features:

Freq. Range: 312.5 kHz to 60.000 MHz
Supply Voltage: +1.00 VDC
Tri-State Function on Pin 1
LVCMOS Compatible

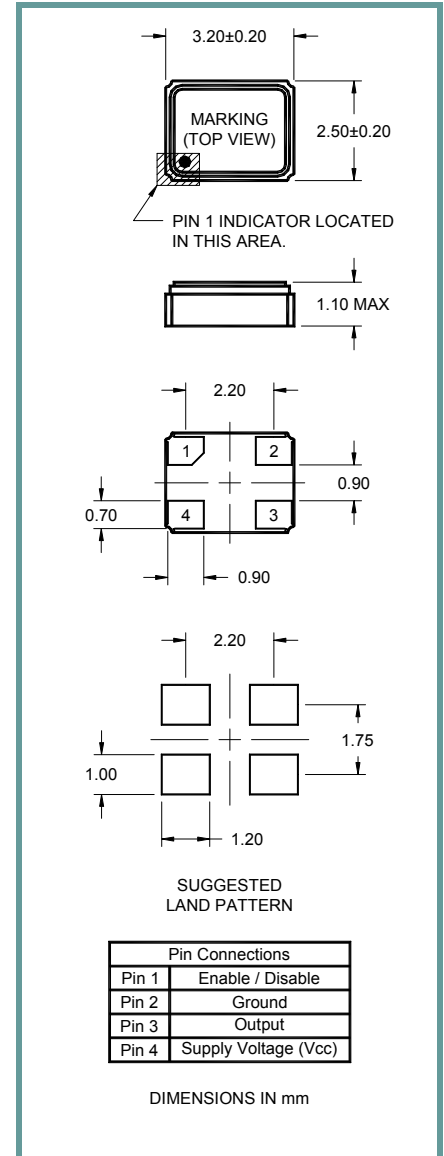
Applications:

SD/HD Video
Wireless Base Stations
Sonet/SDH
T1/E1, T3/E3

Frequency Range	312.500 kHz to 60.000 MHz
Frequency Stability vs Temperature	See Part Number Guide Below
Output Waveform	LVCMOS
Logic "0"	0.1 V of Vcc max
Logic "1"	0.9 V of Vcc min
Rise / Fall Time	6 nSec max for (10% to 90% of waveform)
Duty Cycle (50% of waveform)	See Part Number Guide Below
Start-up Time	10.0 mSec typ.
Load	15 pF
Aging	±3 ppm per year max
Tri-State Function (Pin 1)	
Tri-State Operation	Voh = 70% of Vcc min or no connection to Enable Output Vol = 30% of Vcc or grounded to Disable Out (High Impedance)
Enable / Disable Time	Enable: 1.0 mSec max Disable: 200 nSec max
Disable Current	20 µA max
Supply Voltage (Vcc)	+1.00 VDC ±5%
Current Consumption	
312.000 kHz to 30.000 MHz	2.0 mA max
30.000 MHz to 60.000 MHz	4.0 mA max
Temperature Ranges	
Operating	See Part Number Guide Below
Storage	-50°C to +100°C

Notes:

- It is recommended that a 0.01 µF bypass capacitor be connected between Vdd (Pin 4) and Ground (Pin 2) to minimize power supply noise



Part Number Guide

Package	Operating Temperature	Temperature Stability	Duty Cycle	Frequency
ISM46-	1 = 0°C to +70°C	A = ±25 ppm	5 = 45/55 max	-Frequency
	6 = -10°C to +70°C	B = ±50 ppm	6 = 40/60 max	
	3 = -20°C to +70°C	C = ±100 ppm		
	2 = -40°C to +85°C			

Sample Part Number: **ISM46-3B6-16.000000MHZ**

This a 2.5 X 3.2 SMD Oscillator with an operating frequency of 16.000000 MHz with a temperature stability of ±50 ppm thru a temperature range of -20°C to +70°C . The supply voltage is +1.00 VDC with a duty cycle of 40/60.

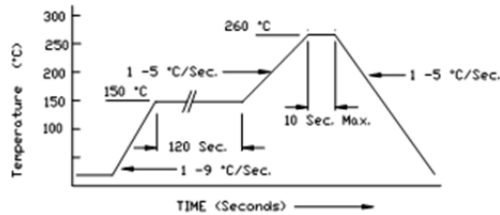
Notes:

- Not all options are available at all frequencies and temperature ranges.
- Please consult with sales department for any other parameters or options.
- Oscillator specification subject to change without notice.

Low Power 2.5 x 3.2 SMD Oscillator

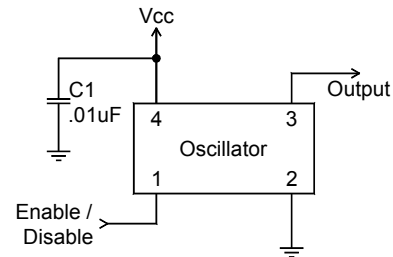
ISM46 Series

Pb Free Solder Reflow Profile:



Units are backward compatible with 240C reflow processes

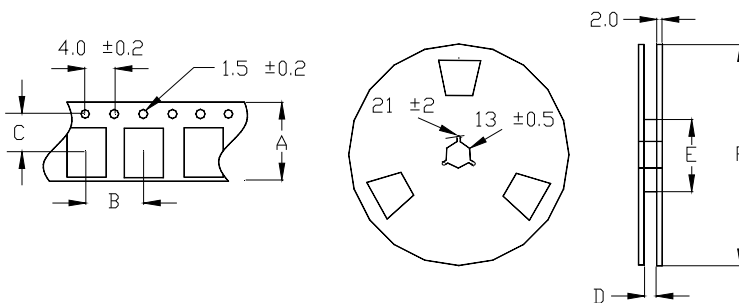
Typical Application:



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:



Quantity per Reel	3000
A	8.0 ±0.2
B	4.0 ±0.1
C	3.5 ±0.2
D	9.0 ±0.3
E	60 / 80
F	180 / 250

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)
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: I-Date Code (yww)
Line 2: Frequency