

ISM95 Series



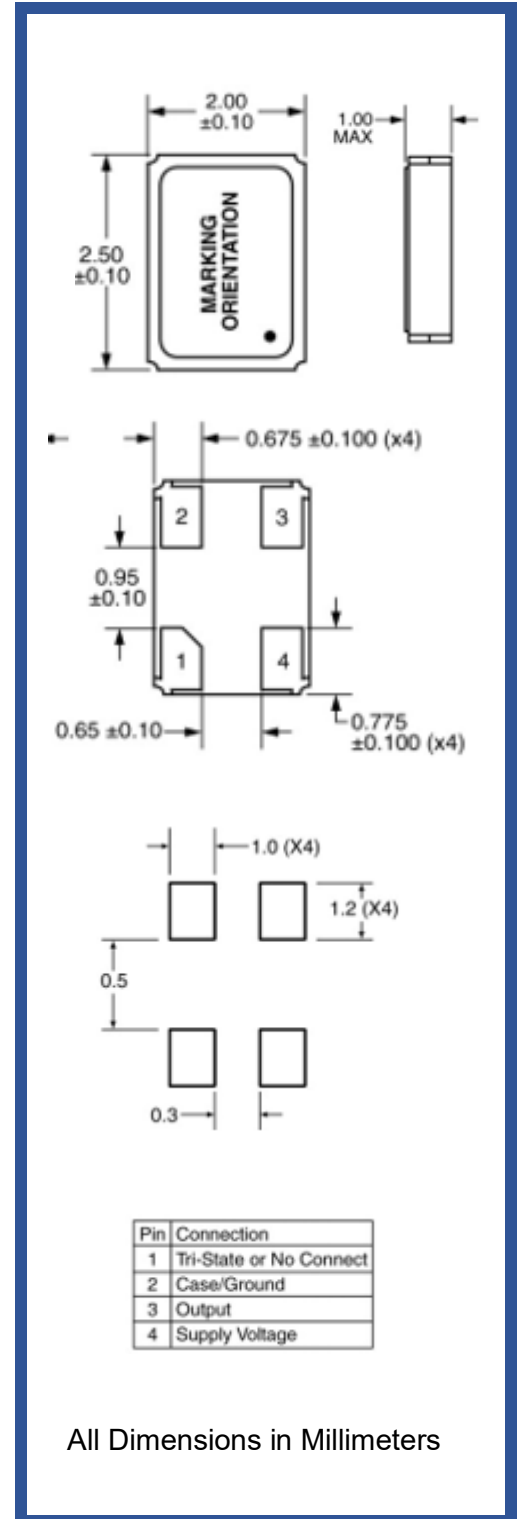
Product Feature:

Low Jitter, Non-PLL Based Output
CMOS Compatible Logic Levels
Compatible with Leadfree Processing

Applications:

Fibre Channel
Server & Storage
Sonet/SDH
802.11/Wifi
T1/E1, T3/E3
System Clock

Frequency Range	1.000 MHz to 156.250 MHz
Frequency Stability <i>(Inclusive of Calibration Tolerance at 25°C, Frequency Stability over Operating Temperature Range, Supply Voltage Change, Output Load Change, and First Year Aging at 25°C)</i>	±10ppm Maximum ±15ppm Maximum ±20ppm Maximum ±25ppm Maximum ±50ppm Maximum ±100ppm Maximum
Operating Temperature Range	0°C to +70°C, -10°C to +60°C, -10°C to +70°C, -20°C to +70°C, -30°C to +75°C, or -40°C to +85°C
Supply Voltage (Vdd) (±5%)	1.8V, 2.5V, 2.7V, 3.0V, 3.3V, 1.62V - 3.63V
Input Current	20mA Maximum
Output Logic Type	CMOS
Output Drive Capability	15pF Maximum 30pF Maximum
Aging	±3ppm/year Maximum
Duty Cycle <i>(Measured at 50% of waveform)</i>	50 ±5(%) or 50 ±10(%)
Rise / Fall Time <i>(Measured from 20% to 80% of waveform)</i>	6nSec Maximum
Output Voltage Logic High	90% of Vdd Minimum
Output Voltage Logic Low	10% of Vdd Maximum
Pin 1 Connection	Tri-State (High Impedance)
Input Voltage Logic High	70% of Vdd Minimum or No Connect to Enable Output
Input Voltage Logic Low	30% of Vdd Maximum to Disable Output (High Impedance)
Standby Current <i>(Disabled Output, High Impedance)</i>	10µA Maximum
Startup Time	10mSec Maximum
RMS Phase Jitter <i>(12kHz to 20MHz offset frequency)</i>	1pSec Maximum
Period Jitter (RMS) <i>(20k adjacent periods)</i>	5pSec Maximum
Period Jitter (pk-pk) <i>(100k adjacent periods)</i>	50pSec Maximum



All Dimensions in Millimeters

NOTES:

- All minimum and maximum limits are specified over temperature and rated operating voltage with 15pF output unless otherwise stated.
- A 0.1µF bypass capacitor is recommended between Vdd (pad 4) and GND (pad 2) to minimize power supply noise.

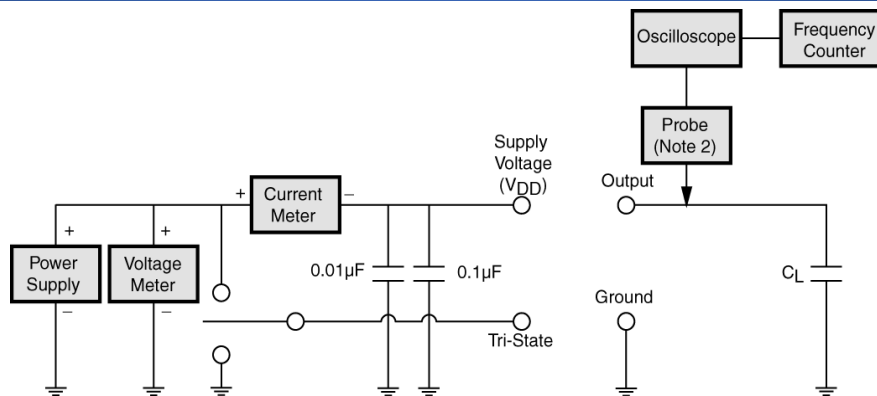
Absolute Maximum Limits:

Storage Temperature Range	-55°C to +125°C
Supply Voltage Range	-0.3Vdc to Vdd +0.3Vdc
Electrostatic Discharge	2000V Maximum
Solder Temperature	260°C Maximum
Junction Temperature	150°C Maximum

Environmental Specifications:

Mechanical Shock	MIL-STD-202, Method 213
Mechanical Vibration	MIL-STD-202, Method 204
Resistance to Soldering Heat	MIL-STD-202, Method 210
Solderability	J-STD-002
Gross Leak	MIL-STD-883, Method 1014
Fine Leak	MIL-STD-883, Method 1014
Moisture Sensitivity Level	MSL 1 (+260°C)

Test Circuit: Enable/Disable Option



Waveform: Enable/Disable Option

