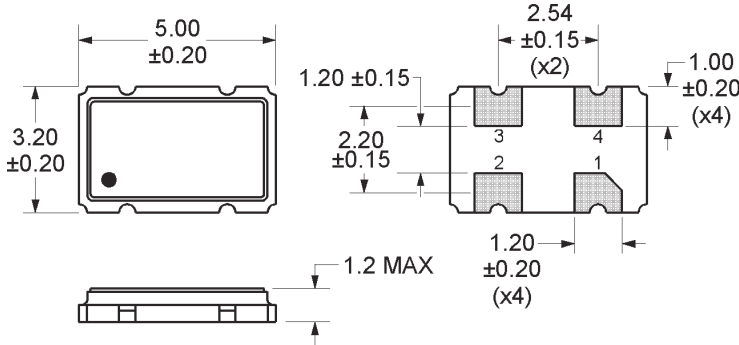


# CORE EXPRESS OSCILLATOR

## C33 SERIES CERAMIC SMD 3.3V OSCILLATOR

This "Core Express Series" is designed for our cost conscientious customers who demand quick turn production without quick turn prices. Standard and custom specifications are available in as little as 3 days.



### Pin Connection

Pin #	Connection
1	Tri-State
2	Ground
3	Output
4	Supply Voltage

### SPECIFICATIONS

<b>Frequency Range</b>	1.000MHz to 155.520MHz
<b>Frequency Tolerance / Stability</b>	(Inclusive of Operating Temperature Range, Supply Voltage, and Load) ±100ppm Maximum, ±50ppm Maximum, ±25ppm Maximum or ±20ppm Maximum
<b>Duty Cycle (@ V<sub>DD</sub>=3.3Vdc)</b>	50% ±10(%) (Standard) or 50% ±5(%) (Optional) at 50% of waveform
<b>Operating Temperature Range</b>	0°C to 70°C or -40°C to 85°C
<b>Storage Temperature Range</b>	-55°C to 125°C
<b>Supply Voltage (V<sub>DD</sub>)</b>	3.3V <sub>DC</sub> ±0.3V <sub>DC</sub>
<b>Aging (at 25°C)</b>	±5ppm / year Maximum
<b>Load Drive Capability</b>	(≤ 70.000MHz) 30pF HCMOS Load Maximum (> 70.000MHz) 15pF HCMOS Load Maximum
<b>Input Current</b>	35mA Maximum
<b>Output Voltage Logic High (V<sub>OH</sub>)</b>	2.7V <sub>DC</sub> Minimum I <sub>OH</sub> =-8mA
<b>Output Voltage Logic Low (V<sub>OL</sub>)</b>	0.5V <sub>DC</sub> Maximum I <sub>OL</sub> =+8mA
<b>Rise Time / Fall Time</b>	6 nSeconds Maximum (20% to 80% of waveform) ≤70.000MHz 4 nSeconds Maximum (20% to 80% of waveform) >70.000MHz
<b>Pin 1 Input Voltage</b>	V <sub>IH</sub> : No Connection or ≥ 70% of V <sub>DD</sub> Enables Output; V <sub>IL</sub> : 20% of V <sub>DD</sub> Disables Output: High Impedence
<b>Start Up Time</b>	10 mSeconds Maximum
<b>Absolute clock Period Jitter</b>	±250pSec Maximum, ±100pSec Typical
<b>One Sigma clock Period Jitter</b>	±50pSec Maximum, ±40pSec Typical

### PART NUMBERING GUIDE

<b>C33</b>	<b>00</b>	<b>A</b>	<b>1</b>	<b>TS</b>	<b>B</b>	<b>-</b>	<b>20.000</b>	<b>M</b>
<b>SERIES</b>	<b>FREQUENCY DEVIATION</b>	<b>OPERATING TEMPERATURE RANGE</b>	<b>DUTY CYCLE</b>	<b>PIN 1 CONNECTION</b>	<b>POWER SUPPLY</b>		<b>FREQUENCY</b>	<b>UNIT OF MEAS.</b>
C33	00=100ppm 50=50ppm 25=25ppm 20=20ppm	A=0°C to 70°C B=-40°C to 85°C	1=±10% 2=±5%	TS=Tri-State	B=3.3V ±0.3V		Entire Frequency With Decimal	M=MHz