

7x5mm SMD High G withstanding CMOS

- Miniature 7.5 x 5.0 x 2.25mm hermetically-sealed package
- Shock survivability < 100,000 g
- Frequency Range 460kHz to 50MHz
- Power Down or Enable/Disable option
- Testing to MIL-PRF-55310 available



DESCRIPTION

XO26 Series oscillators are able to survive high shocks up to 100,000g. The design consists of a hermetically sealed high-shock crystal and a CMOS compatible integrated circuit housed in 7 x 5 x 2.25mm surface mount ceramic package.

SPECIFICATION

Frequency Range:	460kHz to 50.0MHz
Supply Voltage:	1.8, 2.5, 3.3 or 5.0 Volts $\pm 10\%$
Output Logic:	CMOS
Calibration Tolerance:	from $\pm 5\text{ppm}$ at 25°C
Frequency Stability over Temperature*	
Commercial (0~70°C):	$\pm 10\text{ppm}$
Industrial (-40~+85°C):	$\pm 20\text{ppm}$
Military (-55~+125°C):	$\pm 30\text{ppm}$
Total Frequency Stability**	
Commercial:	$\pm 15\text{ppm}$
Industrial:	$\pm 25\text{ppm}$
Military:	$\pm 35\text{ppm}$
Output Load***:	15pF
Start-up Time:	10ms maximum
Rise/Fall Time:	8ns maximum
Shock Survival:	< 100,000g peak, 0.5ms, 0.5 sine
Vibration Survival:	20g rms, 10-2000Hz random
Packaging:	Tray pack or tape and reel

Notes:

- * Does not include calibration tolerances
- ** Frequency over temperature relative to nominal frequency
- *** TTL loads and higher CMOS loads available - contact sales.

Absolute Maximum Ratings

Supply Voltage:	-0.5 to 7.0Volts
Storage Temperature:	-55° to +125°C
Maximum Process Temperature:	260°C for 10 seconds

ENABLE/DISABLE, POWER DOWN, NOT CONNECTED

Option	Specifying Code	Pad 1*	Pad 3
Power Down	P	LOW HIGH	High Z Frequency output
Enable/Disable	T	LOW HIGH	High Z Frequency output
Not Connected	Blank	NC	Frequency output

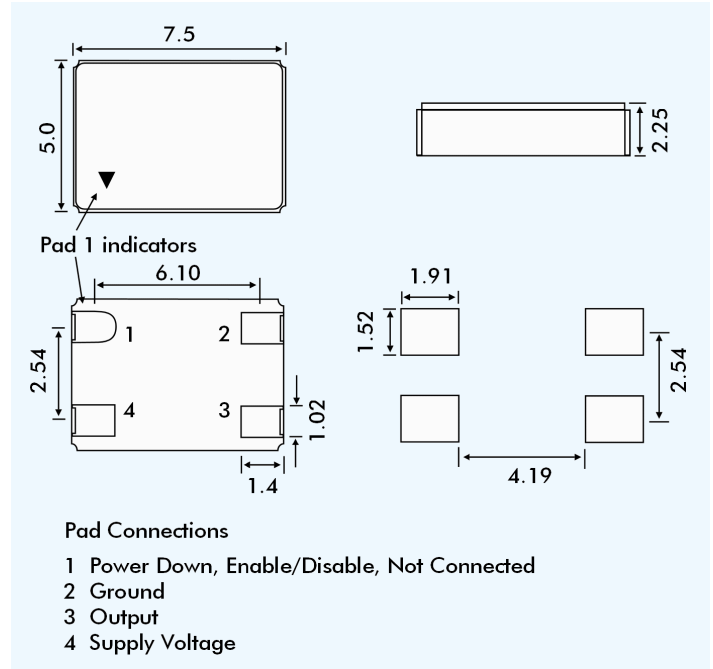
* Normally HIGH (internal pull-up resistor)

ENABLE/DISABLE vs. POWER DOWN

P - Power Down: When Pad 1 is LOW the oscillator stops running
T - Enable/Disable: When Pad 1 is LOW the internal oscillator continues to run but the output (Pad 3) is in a high impedance (Z) state.

Power Down: Disabled current consumption low, recovery delayed.
Enable/Disable: Disabled current consumption lower than normal, Recovery immediate.

OUTLINE & DIMENSIONS

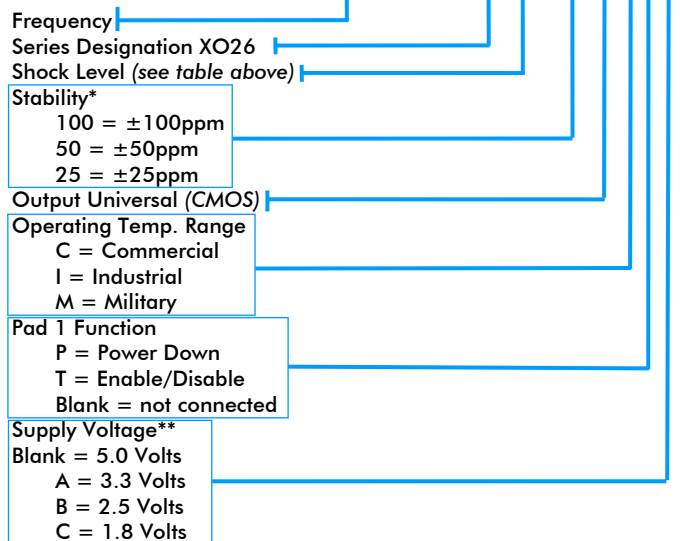


SHOCK WITHSTAND

Code	Shock Level	Code	Shock Level
A	5,000g	F	50,000g
B	10,000g	G	75,000g
C	20,000g	H	100,000g
D	30,000g		

PART NUMBERING

Example: **50.000MHz XO26A050UMTA**



* For other stability requirements enter figure required.
 ** For other supply voltage enter required voltage.