

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 $7 \times 5 \times 2.25$ mm surface mount ceramic package.

SPECIFICATION

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

Notes:

- Does not include calibration tolerances
- ** Frequency over temperature raltive 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	Р	LOW HIGH	High Z Frequency output
Enable/Disable	Т	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,

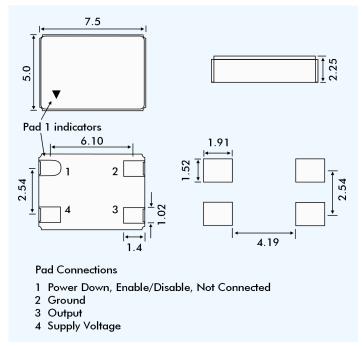
recovery delayed.

Enable/Disable: Disabled current consumption lower than normal,

Recovery immediate.



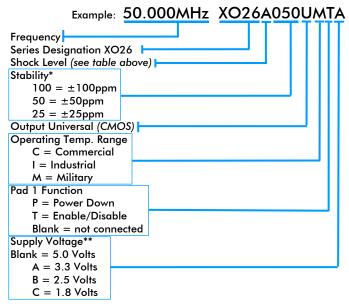
OUTLINE & DIMENSIONS



SHOCK WITHSTAND

Code	Shock Level	Code	Shock Level
Α	5,000g	F	50,000g
В	10,000g	G	75,000g
С	20,000g	Н	100,000g
D	30,000g		

PART NUMBERING



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