



XOSM-57

Vishay Dale

Surface Mount Oscillator



The XOSM-57 series is an ultra miniature package clock oscillator with dimensions 7.0 x 5.0 x 1.6 mm. It is mainly used in portable PC and telecommunication devices and equipment.

FEATURES

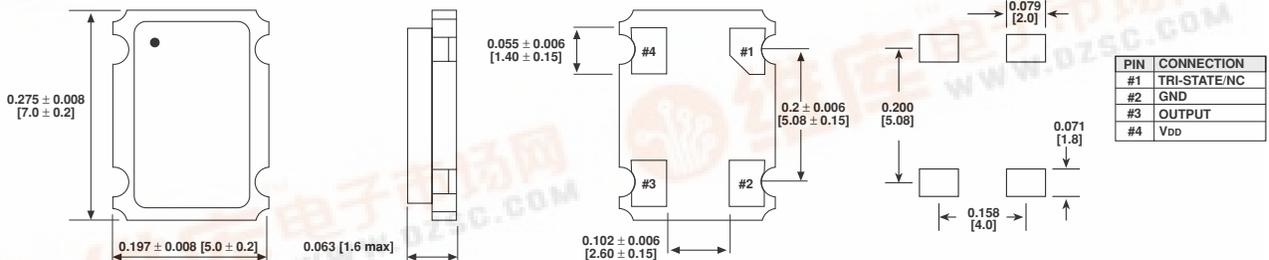
- Miniature Package
- Tri-state enable/disable
- TTL/HCMOS compatible
- Tape and Reel
- IR Re-flow
- 5V input voltage

STANDARD ELECTRICAL SPECIFICATIONS

PARAMETER	SYMBOL	CONDITION	XOSM-57
Frequency Range	F_O		1MHz ~ 100.000MHz
Frequency Stability*		All Condition*	$\pm 25\text{ppm}, \pm 50\text{ppm}, \pm 100\text{ppm}$
Operating Temperature	T_{OPR}		$0^\circ\text{C} \sim 70^\circ\text{C}$ (- $40^\circ\text{C} \sim +85^\circ\text{C}$ option)
Storage Temperature Range	T_{STG}		$-55^\circ\text{C} \sim +125^\circ\text{C}$
Power Supply Voltage	V_{DD}		$5.0\text{V} \pm 10\%$
Aging (First Year)		$25^\circ\text{C} \pm 3^\circ\text{C}$	$\pm 5\text{ppm}$
Supply Current	I_{DD}	1.000MHz to 23.999MHz	20mA Max
		24.000MHz to 49.999MHz	30mA Max
		50.000MHz to 69.999MHz	40mA Max
		70.000MHz to 100.000MHz	60mA Max
Output Symmetry	Sym	At $\frac{1}{2} V_{DD}$	40/60%(45/55% Option)
Rise Time	T_r	$10\%V_{DD} \sim 90\%V_{DD}$	5 nS Max
Fall Time	T_f	$90\%V_{DD} \sim 10\%V_{DD}$	5 nS Max
Output Voltage	V_{OH}		$90\% V_{DD}$ Min
	V_{OL}		$10\% V_{DD}$ Max
Output Load	TTL Load		1 ~ 10TTL
	HCMOS Load		30pF Max
Start-up Time		T_s	10mS Max
Pin 1, tri-state function			Pin 1 = H or open.... output active at pin 3 Pin 1 = L..... high impedance at pin 3

*Include: 25°C tolerance, operating temperature range, input voltage change, aging, load change, shock and vibration.

DIMENSIONS in inches [millimeters]



***note: A 0.01µF bypass capacitor should be placed between V_{DD} (Pin4) and GND(Pin2) to minimize power supply line noise

PIN	CONNECTION
#1	TRI-STATE/NC
#2	GND
#3	OUTPUT
#4	V_{DD}

ORDERING INFORMATION

XOSM-57 MODEL	B FREQUENCY STABILITY	R OTR	E ENABLE/DISABLE	50M FREQUENCY/MHZ
	AA = 0.0025% (25PPM) A = 0.005% (50PPM) B = 0.01% (100PPM) Standard	Blank = Standard R = - 40°C to + 85°C	E = Disable to Tristate	

