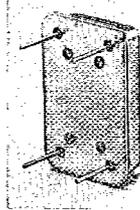
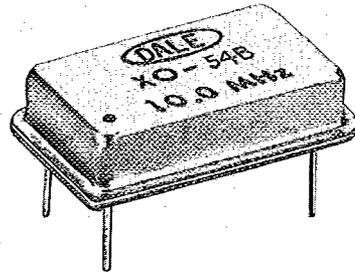




HYBRID CRYSTAL CLOCK OSCILLATOR

VISHAY/ DALE ELECTRONICS 95D D

MODEL XO-54B, 250 KHz to 60 MHz Low Profile, Resistance Welded Metal Package



ACTUAL SIZE

FEATURES

- HCMOS, CMOS, NMOS, TTL, LS-TTL, S-TTL compatible
- Enabled tri-state output optional
- Hermetically sealed package

SPECIFICATIONS

ELECTRICAL

Operating Temperature Range: 0°C to 70°C
Frequency Stability: (Inclusive of Calibration Tolerance at 25°C Temperature Change, Input Voltage Change, Load Change, Aging, Shock and Vibration): ±.01% (±100 PPM)
Input Voltage (Vdd): +5.0 ± 0.5 VDC
Input Current: 5 to 40 mA Typ. (see graph)
Rise Time: 10nS Max. (CMOS Levels), 6nS Max. (TTL Levels)
Fall Time: 10nS Max. (CMOS Levels), 6nS Max. (TTL Levels)
Logic '0' Level: 0.1 Vdd Max. CMOS, 0.4V Max. TTL
Logic '1' Level: 0.9 Vdd Min. CMOS, 2.4V Min. TTL
Logic '0' Sink Current: 16 mA Min.
Logic '1' Source Current: 0.4 mA Min.
Output Waveform: Squarewave, HCMOS, CMOS, NMOS, TTL, LS-TTL, S-TTL Compatible, Waveform Symmetry (0.5 Vdd CMOS or 1.4V TTL Levels): 50 ± 10%
Output Load: 50 pF HCMOS or 1-10 TTL Loads

Enable/Disable Option: Output on Pin 8 is normal when Pin 1 is open or above 2.2V level. Output is disabled (high impedance) when Pin 1 is below 0.8V.

Enable Input: 2.2V Min. @ 10µA Max.

Disable Input: 0.8V Max. @ 150µA Max.

Enable/Disable Delay Time: 100nS Max.

Environmental:

Temperature Cycle: -55°C to +85°C, 3 cycles
 Shock: 1000 G's 0.35 millisecond, 1/2 sine wave, 3 shocks each plane
 Vibration: .06 D.A., 10-55 Hz, 35 G, 55-2000 Hz
 Humidity: 85% relative humidity @ 85°C, 240 Hours

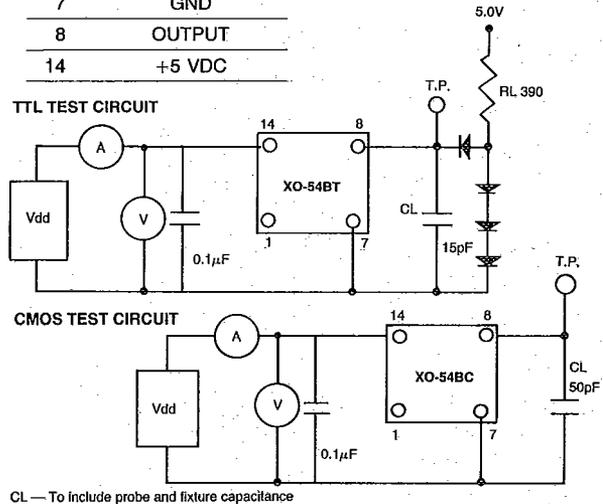
Mechanical:

Hermetically Sealed Package: Leak rate less than 2 x 10⁻⁸ atmosphere cc/sec. of helium
 Marking Ink: Epoxy, solvent resistant
 Solvent Resistance: Isopropyl alcohol, Trichloroethane, Freon TMC
Terminal Solderability: Per MIL-STD-202, Method 208C

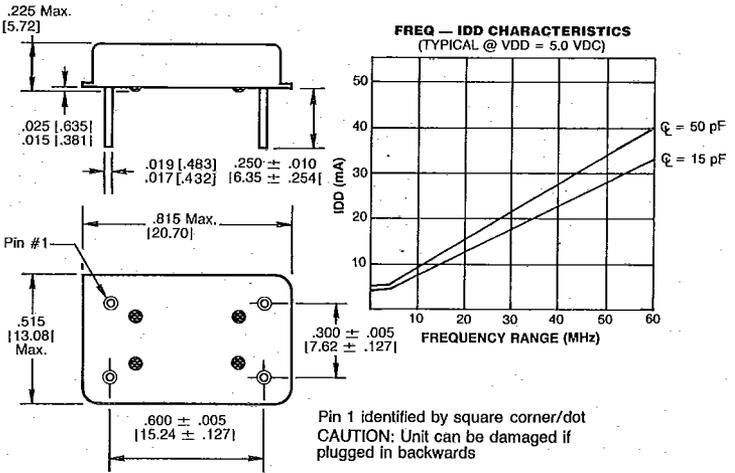
PIN	CONNECTION
1	N.C. or E/D
7	GND
8	OUTPUT
14	+5 VDC

STANDARD FREQUENCIES (MHz)

14.31818	32.0
20.0	40.0



DIMENSIONS [Numbers in brackets indicate millimeters]



HOW TO ORDER

XO-54	B			10
PART NO. CODE	FREQ. ACCURACY	MEASURING METHOD	ENABLE/DISABLE FUNCTION	FREQ./MHz
A = .005%	C: C-MOS Level	E: With Function		
B = .01% (Std. Tol.)	T: TTL Level	BLANK: #1 Pin Open		
C = .05%				

Contact factory for other models, logic families, stabilities and temperature ranges.
DALE ELECTRONICS, INC., 1155 West 23rd St., Tempe, AZ 85282 • Phone 602-967-7874
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