XE41 - L00 SERIES (HC/ACMOS/LVTTL), 3.3 VDC

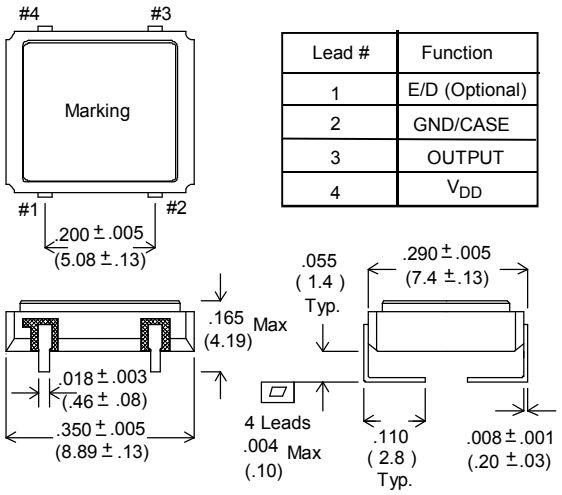
High Reliability Hybrid Microcircuit Crystal Oscillators

Surface Mount, Formed Leads

(Similar to M55310/38)

- ***Ruggedized 4 point crystal mount***
- ***High Shock & Vibration***
- ***Low Profile Surface Mount***
- ***Tristate Output Available***

Frequency Range	450 KHz to 165 MHz
Frequency Accuracy at + 25 ^{O}C	± 15 PPM
Frequency Stability Vs. Temperature	See Options Below
Operating Temperature Range	See Options Below
Input Voltage	+ 3.3 VDC ± 10%
Input Current at +3.30 VDC (No Load)	
450 KHz to 8.0 MHz	3 mA Max.
8.1 MHz to 16.0 MHz	6 mA Max.
16.1 MHz to 32.0 MHz	10 mA Max.
32.1 MHz to 60.0 MHz	20 mA Max.
60.1 MHz to 100.0 MHz	35 mA Max.
100.1 MHz to 165.0 MHz	60 mA Max.
Output	HC/ACMOS/LVTTL
Load	10 KΩ // 15 pf or 6 to 10 TTL
Output Symmetry: (at 50% Output Level)	
< 40 MHz	55/45% Max
≥ 40 MHz	60/40% Max.
Rise & Fall Times (10% to 90% Level)	
< 40 MHz	6 nS Max.
≥ 40 MHz	3 nS Max.
Enable/Disable	See Options Below
Start-Up Time	5 mS Max.
Phase Jitter (10 KHz to 20 MHz Integrated)	0.15 pS rms Typical
Frequency Stability Vs. 10% change in Voltage	± 4 PPM Max.



Lead #	Function
1	E/D (Optional)
2	GND/CASE
3	OUTPUT
4	V_{DD}

Dimensions: Inches (mm)

Aging at +70 ^{O}C	± 3 PPM Max. first year, ± 2 PPM Max./ Yr. thereafter
Package, Seal & Weight	Ceramic 90% AL_2O_3, Hermetic - Resistance Welded, 0.5 Gms typical
Lead Material & Finish	Kovar, 50 to 80 Microinches gold over 100 to 250 microinches Nickel, Hot Solder Tinning per MIIL-PRF-55310 is optional at additional cost.
Solder Reflow, Temp./Time	260 ^{O}C Max for 10 Seconds Max.
Package Thermal Resistance (θ_{JC})	50 ^{O}C / Watt

Contact Xsis Engineering for any other special requirements.

ORDERING INFORMATION (Select from options below) :

XE41 – L [ ] [ ] [ ] – [ ] – FREQUENCY

Model #

Frequency Stability

1 = ± 0.1%
2 = ± 0.05%
3 = ± 100 PPM
4 = ± 50 PPM
5 = ± 20 PPM*
6 = ± 10 PPM*
7 = ± 25 PPM*

*Options 5, 6 & 7 are not available for all operating temperature range options

Operating Temperature Range

1 = 0 ^{O}C to + 70 ^{O}C
2 = - 40 ^{O}C to + 85 ^{O}C
3 = - 55 ^{O}C to +125 ^{O}C
4 = - 55 ^{O}C to +105 ^{O}C
5 = - 40 ^{O}C to + 95 ^{O}C
6 = - 20 ^{O}C to + 70 ^{O}C

G = *Enable/Disable, Leave Blank Otherwise

M = 883B Screening, Leave Blank Otherwise.
H = Hi-Rel-Screening, Leave Blank Otherwise.

***Enable/Disable Input:** A "low" level at the input disables the output to a HI-Z state. Enable/disable input has internal pull-up.

EXAMPLE: XE41 - L43G - M - 24.000 MHz = HC/ACMOS/LVTTL Output, with Enable/ Disable Option, ± 50 PPM over -55 ^{O}C to +125 ^{O}C, Mil - Screened , 24.000 MHz

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