IMPACT, LLC

Thru-Hole Oscillator

CHOR

13.2 x13.2mm Low Current Half-Size 8-pin DIP

Lead Free

EU RoHS EU RoHS Leaf Compliant

Reach Compliant

China RoHS Compliant

Conflict Minerals Free

Specifications

Package		CHOR
Frequency Range (fo)		0.500MHz ~ 70.00MHz
Logic Family		HCMOS
Freq. Stability (Df/fo)		±100ppm
Aging/Year (fa)		±5ppm
Temp. Range	**Operating (TOPR)**	0°C ~ +70ºC
	Storage (TSTG)	-40ºC ~ +100ºC

Electrical

Power Supply	**Voltage (VDD)**	5.0 ±10%VDC
	Current (ICC)	10mA Max
Output	**Load TTL(N)**	15pF
	Voltage (VOL)	10% Vdd
	Voltage (VOH)	90% Vdd
Rise (TR) & Fall (TF) Time		
0.500Mhz ~ 25.00MHz		10nS
25.100MHz ~ 70.00MHz		6nS
Symmetry/Duty		45/55

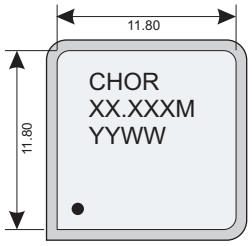
Tri-State

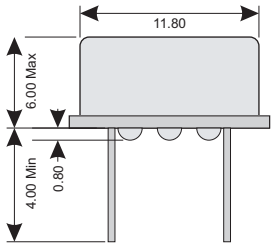
Tri State (Pin 1)	Default (Pin 5)	U2 Option (Pin 5)
4.5Vdc Min	Enabled Active	Disabled High Z
N/C or Open	Enabled Active	Disabled High Z
0.5Vdc Max	Disabled High Z	Enabled Active
Enable Time	10mS Max	10mS Max
Disable Time	150nS Max	150nS Max

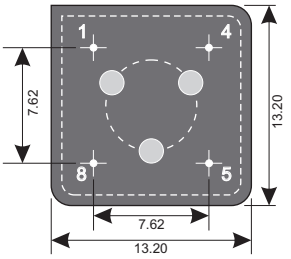
Absolute Maximum Ratings

Maximum Storage Temp	-55°C to +125°C
Voltage (VDD)	7.0 VDC
Input Voltage	0.5Vdc ~ Vdd+0.5Vdc

Dimensions (mm)



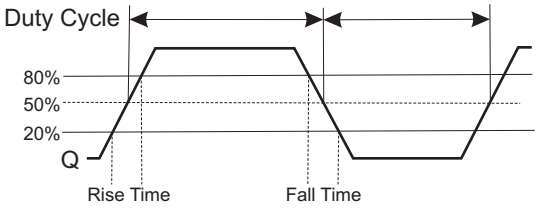




Connections

Pin 1	Tri-State
Pin 4	Ground
Pin 5	Output
Pin 8	Vdd

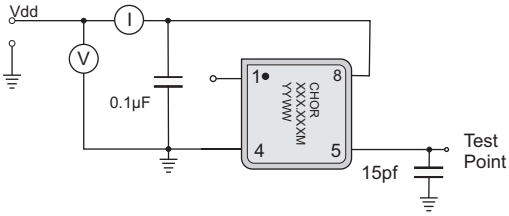
HCMOS Waveform



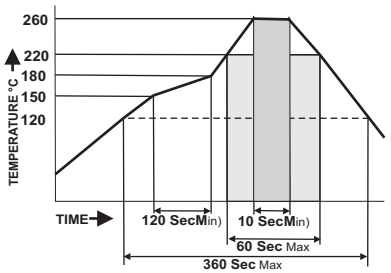
Environmental And Mechanical

Temperature	10 Cycles of -30ºC (30Mins), Normal (1Hr), 85ºC (30Mins), Normal (1Hr)
Shock	Accelerated at 1000G for 1mS in each perpendicular axis.
Vibration	4 Cycles of 20G acceleration at 20 - 2,000Hz within 4 Minutes in each perpendicular axis.
Solder	Peak Temperature of 260ºC Max for 10 Seconds with preheat of 160ºC for 90±10% for 10 Seconds for a Maximum of 2 Cycles.

HCMOS Test Circuit



260ºC Reflow Profile



Part Number

CHOR - XX.XXX M - SX RX UX QX

Operating Temp	
R10	-65°C ~ +150°C
RC	Custom Temp.

Stability	
S1	±50ppm
S2	±25ppm
S3	±10ppm
SC	Cust. Stability

Duty Cycle	
Q2	47.5/52.5 Duty

Tristate	
U2	Lo Enable

Duty Cycle: **Default**: 45/55

Tristate: **Default:** Enabled Hi

Operating Temperature Range: **Default:** 0ºC ~ +70ºC

Stability: **Default**: ±100ppm

Frequency: 0.500MHz ~70.000MHz; must be specified

Standard RoHS Compliant 13.2 x 13.2mm 8-Pin Half Dip Thru-Hole Oscillator

Example: **CHOR-10.000M** 10.000MHz, 5.0V ±100ppm Oscillator operating at 0ºC ~ +70ºC
Example: **CHOR-50.000M-S2R10** 50.000MHz, 5.0V ±25ppm Oscillator operating at -65°C ~ +150°C

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