IMPACT, LLC

HL32R

Ceramic Surface Mount Oscillator

5.0 x 3.2mm 3.3V HCSL Clock Oscillator

Specifications

Part Number		HL32R
Frequency (fo)		27.000MHz ~ 220.000MHz
Logic Family		HCSL
Freq. Stability (Df/fo)		±100 ppm
Temp. Range	**Operating (TOPR)**	-10°C ~ +70°C
	Storage (TSTG)	-55°C ~ +125°C
Start Time		3.0mS

Phase Noise

RMS Phase Jitter (12kHz-20MHz)		0.2pS Typ; 0.6pS Max
Phase Noise	@ 100Hz Offset	-90 dBc/Hz
	@ 1KHz Offset	-120 dBc/Hz
	@ 10KHz Offset	-135 dBc/Hz
	@100KHz Offset	-140 dBc.Hz
	@ 1MHz Offset	-145 dBc/Hz
	@ 10MHz Offset	-155 dBc/Hz

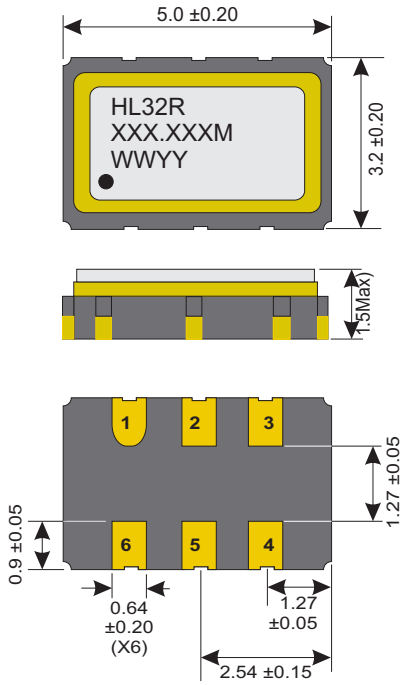
Electrical

Power Supply	**Voltage (VDD)**	3.3 VDC ±5%
	Current (ICC)	27 to 32.5MHz 28mA 32.5 to 40MHz 28mA 40 to 65MHz 28mA 65 to 90MHz 28mA 90 to 125MHz 30mA 125 to 160MHz 32mA 160 to 220MHz 32mA
Stand-by current		10uA (Max)
Output	**"H" Output Voltage**	660mv(Min) 740mv(Typ) 850mv(Max)
	"L" Output Voltage	-150mv(Min) 0V(Typ) 150mv(Max)
	Output Swing (Vopp)	650mv (Min)
	Output Load	50 Ω
	Rise & Fall Time	0.5nS Typ (20% to 80%)
	Output Symmetry	45/55% @ 50% Level

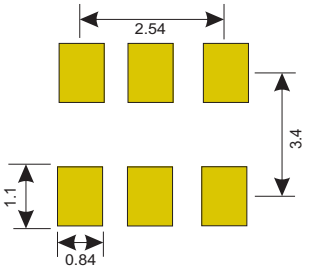
Tri-State

Tri-State	**Tri-State (Pin 1)**	**Output (Pin 4/5)**
	Open (N/C)	Active
	0.7Vdd (Min)	Active
	0.3Vdd (Max)	Disable (High Z)
Enable Time		2.0mS Max
Disable Time		200nS Max

Dimensions (mm)



Land Pattern (mm)



Lead Free

RoHS Compliant LEAD FREE

Connections

Pin 1	Enable/Disable
Pin 2	N/C
Pin 3	Case Grnd
Pin 4	Output
Pin 5	OutputN
Pin 6	Vdd

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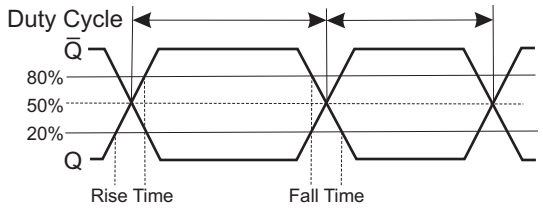
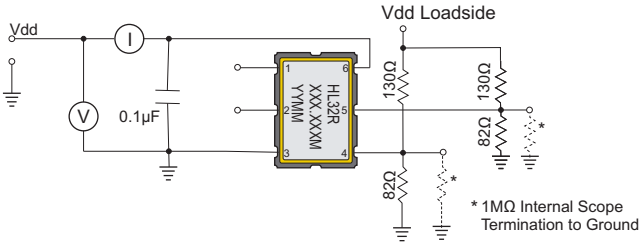
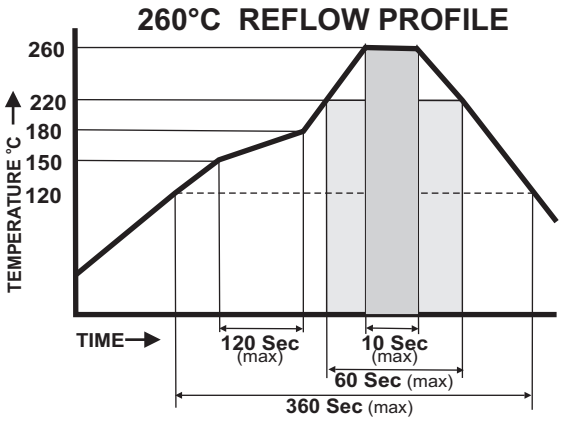


Environmental And Mechanical

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 accelleration 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.





Part Number

HL32R -XXX.XXX M-SX RX-T

Stability	
S1	±50ppm
S2	±25ppm
S3	±20ppm

Temp Range	
R6	-40~+85°C

Tape & Reel

Temperature Range Options **Default:** -10ºC ~ +70ºC

Stability Options **Default**:±100ppm; (See Table Above)

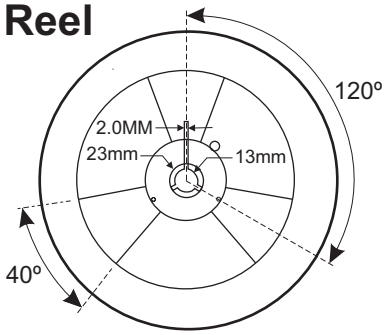
Frequency: 27.000Mhz ~ 220.000MHz

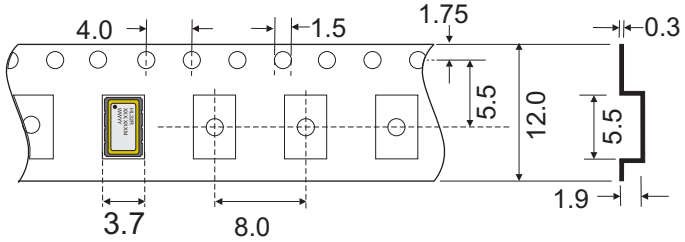
Standard RoHS Compliant 5.0 x 3.2mm SMD Clock Oscillator

Example: **HL32R-155.000M-T** is 155.000MHz ±100ppm oscillator operating at -10ºC ~ +70ºC delivered on Tape & Reel

Example: **HL32R-155.000M-S2R6-T** is 155.000MHz ±25ppm oscillator operating at -40ºC ~ +85ºC delivered on Tape & Reel

Tape & Reel





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