Hang Crystal International

TEMPERATURE COMPENSATED CRYSTAL OSCILLATOR

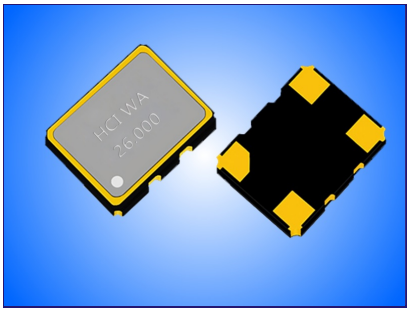
8153H

TCXO UNIT WITH HCMOS OUTPUT IN SMD 5.0X3.2MM CERAMIC SEAM SEAL PACKAGE.

PRODUCT FEATURES

- Small dimensions 5.0x3.2x1.1 with 4 solder pads.
- Tight stabilities over temperature range.
- RoHS compliant, LEAD-FREE, HALOGEN-FREE and REACH compliant.

PRODUCT PHOTO (NOT IN SCALE)



APPLICATIONS

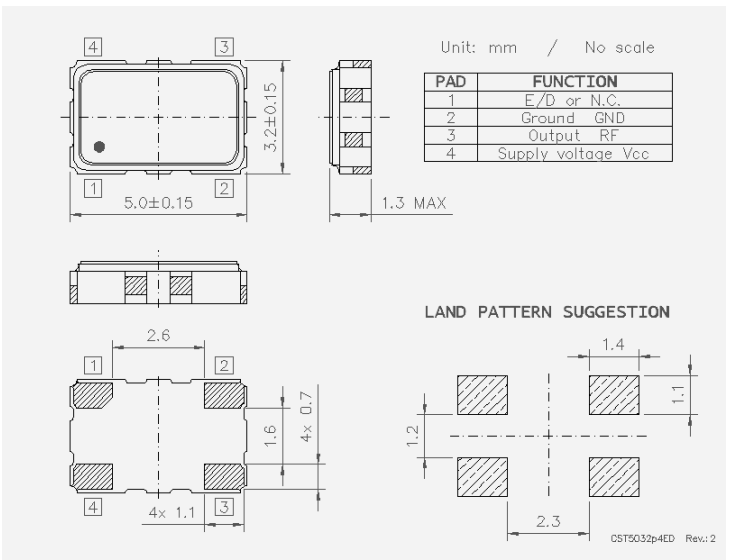
- WiMAX / WLAN / Ethernet
- Telecommunication
- Mobil applications

PRODUCT SPECIFICATIONS

PARAMETER	SUPPLY VOLTAGE 1.8v	2.5v	2.8/ 3.0/ 3.3v	REMARKS
Frequency range	10 ~ 52MHz			--
Frequency tolerance	±2.0ppm			Initial tol. @+25°C
Frequency stability	±0.5ppm / ±1.0; 1.5ppm / ±2.0ppm; ±2.5ppm			See note below table
Operating temperature range	-10 to +70°C / -30 to +85°C / -40 to +85°C			In combination to above stabilities.
Aging per year	±1.0ppm			@+25°C
Output waveform and load	LVCMOS 15pF			--
Output voltage level HIGH	90%Vcc			Minimum
Output voltage level LOW	10%Vcc			Maximum
Rise and Fall times	5ns	6ns	8ns	@10~90% of V_{CC}
Symmetry (duty cycle)	45~55%			@ 50%V_{CC}
Phase noise (example 19.2MHz)	-115dBc/Hz / -135dBc/Hz / -148dBc/Hz			@100Hz / 1kHz / 10kHz
Phase jitter RMS	<1ps			12kHz≤Fj≤20MHz
Supply current	5mA	7mA	10mA	@15pF

Note: Frequency stability is the frequency deviation over temperature range in reference to +25°C

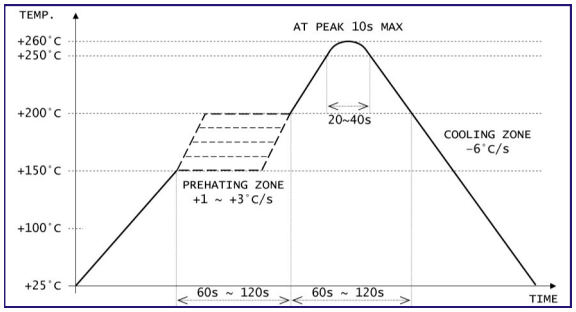
PACKAGE OUTLINE / DIMENSIONS



PACKAGING INFORMATION

- Tape & Reel compliant to EIA-481.
- Embossed carrier width 12mm.
- Component pitch in carrier 8mm.
- Reel diameter 180mm.
- QTY per reel: 1,000pcs

RECOMMENDED REFLOW PROFILE



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