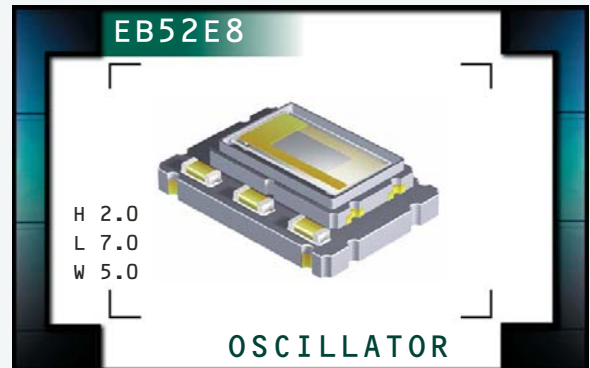


EB52E8 Series



- Temperature Compensated Crystal Oscillators (TCXO)
- LVCMOS Output
- +3.3V Supply Voltage
- External Voltage Control Option
- 10 Pad Ceramic SMD Package
- RoHS Compliant (Pb-Free)



ELECTRICAL SPECIFICATIONS

Nominal Frequency (MHz)	6.000, 6.144, 6.400, 6.500, 8.000, 8.192, 9.216, 9.600, 9.720, 10.000, 12.000, 12.288, 12.800, 13.000, 14.400	
Frequency Stability	vs. Operating Temperature Range ($V_{DD} = 3.3V_{DC}$, $V_C = 1.65V_{DC}$) vs. Frequency Tolerance ($25^{\circ}C \pm 2^{\circ}C$, $V_{DD} = 3.3V_{DC}$, $V_C = 1.65V_{DC}$) vs. Input Voltage ($\pm 5\%$) vs. Load ($\pm 10\%$) vs. Aging (at $25^{\circ}C$)	See Part Numbering Guide ± 1.0 ppm Maximum ± 0.3 ppm Maximum ± 0.3 ppm Maximum ± 1 ppm / Year Maximum
Operating Temperature Range	See Part Numbering Guide	
Supply Voltage (V_{DD})	$3.3V_{DC} \pm 5\%$	
Input Current	10mA Maximum	
Output Voltage Logic High (V_{OH})	$I_{OH} = -4mA$	90% of V_{DD} Minimum
Output Voltage Logic Low (V_{OL})	$I_{OL} = +4mA$	10% of V_{DD} Maximum
Rise/Fall Time	Measured at 20% to 80% of Waveform	5nSec Maximum
Duty Cycle	Measured at 50% of Waveform	$50 \pm 5(\%)$
Load Drive Capability	15pF Maximum	
External Trim (Control Voltage Option)	$1.65V_{DC} \pm 1.65V_{DC}$; Positive Transfer Characteristic	± 5 ppm Minimum
Control Voltage Range	$0.0V_{DC}$ to V_{DD}	
Linearity	5% Maximum	
Input Impedance	100kOhms Minimum	
Typical Phase Noise (at 12.800MHz)	At offset of 10Hz At offset of 100Hz At offset of 1kHz At offset of $\geq 10kHz$	-80dBc/Hz -115dBc/Hz -135dBc/Hz -145dBc/Hz
Tri-State Input Voltage (V_{IH} and V_{IL})	No Connect $+0.9V_{DD}$ Minimum $+0.1V_{DD}$ Maximum	Enables Output Enables Output Disables Output: High Impedance
RMS Phase Jitter	$F_J = 12kHz$ to 20MHz	1pSec Maximum
Start Up Time	5mSec Maximum	
Storage Temperature Range	$-40^{\circ}C$ to $+125^{\circ}C$	

MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV. DATE
ECLIPTEK CORP.	OSCILLATOR	EB52E8	CERAMIC	3.3V	OS5P	09/07