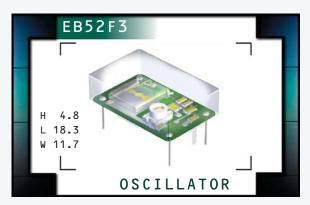
EB52F3 Series

- Temperature Compensated Crystal Oscillator (TCXO)
- HCMOS Output
- 3.3V Supply Voltage
- Stability to ±1.5ppm
- External voltage control option available





NOTES

ELECTRICAL SPECIFICATIONS

Frequency Range				1.544MHz to 4	1.544MHz to 44.736MHz		
Operating Temperature Range				See Table 1	See Table 1		
Storage Temperature Range				-40°C to 85°C	-40°C to 85°C		
Supply Voltage	(V _{DD})			3.3V _{DC} ±5%	3.3V _{DC} ±5%		
Input Current		1.544MHz to 20.000MHz		10mA Maximun	10mA Maximum		
		20.001MHz to 44.736MHz		20mA Maximun	20mA Maximum		
Frequency Stab	oility	vs. Operating Temperature Range		See Table 1	See Table 1		
		vs. Input Voltage (V _{DD} ±5%)		±0.3ppm Maxir	±0.3ppm Maximum		
		vs. Load (±2pF)		±0.2ppm Maxir	±0.2ppm Maximum		
Aging (at 25°C	:)			±1ppm/year M	±1ppm/year Maximum		
Output Voltage	Logic High (V _{OH})			90% of V _{DD} Mini	90% of V _{DD} Minimum		
Output Voltage	Logic Low (V _{oL})			10% of V _{DD} Max	10% of V _{DD} Maximum		
Rise Time / Fal	l Time	20% to 80% of Waveform		10 nSeconds M	10 nSeconds Maximum		
Duty Cycle		at 50% of Waveform		50 ±10(%)	50 ±10(%)		
Load Drive Capability				15pF HCMOS Load Maximum			
Internal Trim (Top of Can)				±3ppm Minimum			
Control Voltage	e (External)			$1.65V_{DC} \pm 1.35V$	$1.65V_{DC}\pm1.35V_{DC}$, Positive Transfer Characteristic		
Frequency Devi	iation	Referenced to F_0 at $V_C = 1.65 V_{DC}$; $V_{DD} = 3.3 V_{DC}$		±7ppm Minimu	±7ppm Minimum, ±20ppm Maximum		
Input Impedan	ice				10k0hms Typical		
Modulation Bandwidth		Measured at -3dB, $V_C = 1.65V_{DC}$		10kHz Minimur	10kHz Minimum		
Typical Phase Noise		at 10Hz Offset		-70dBc/Hz	-70dBc/Hz		
		at 100Hz Offset		-100dBc/Hz	-100dBc/Hz		
		at 1kHz Offset at 10kHz Offset		-130dBc/Hz	-130dBc/Hz -140dBc/Hz		
				-140dBc/Hz			
		at 100kHz Offset		-145dBc/Hz	-145dBc/Hz		
MANUFACTURER	CATEGORY	SERIES	PACKAGE	VOLTAGE	CLASS	REV . DATE	
ECLIPTEK CORP.	OSCILLATOR	EB52F3	14-PIN DIP	3.3V	OS1W	10/06	

PART NUMBERING GUIDE

EB52F3 A 15 V - 12.800M



-40°C to +85°C

TABLE 1: PART NUMBERING CODES Frequency Stability X = Available from 1.544MHz to 32.768MHz Y = Available at any Frequency Temperature Range ±1.5ppm ±2.0ppm ±3.0ppm ±5.0ppm 30 Code 0°C to +50°C Υ Υ Υ 0°C to 70°C Υ Υ Υ Х -20°C to +70°C Χ Υ Υ -30°C to +75°C Υ Υ ח Х

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