

Marketing Bulletin

DATE: December 27th, 2006
TO: All Sales Personnel
FROM: Mark Stoner
RE: Product Termination

To all concerned parties,

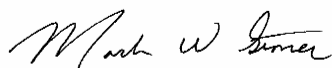
This bulletin is to notify all customers of the discontinuation of the following Ecliptek series effective December 27th, 2006:

Series	Description	Recommended Replacement
EC20	3.3V 14 pin DIP Oscillator	EB52F3 or EB52F5

In compliance with our End of Life (EOL) policy, this will serve as advanced notice of product termination. New orders will not be accepted after March 31st, 2007, with delivery to conclude by June 30th 2007.

If there are any questions pertaining to this bulletin, please feel free to contact me. Thank you again for your cooperation.

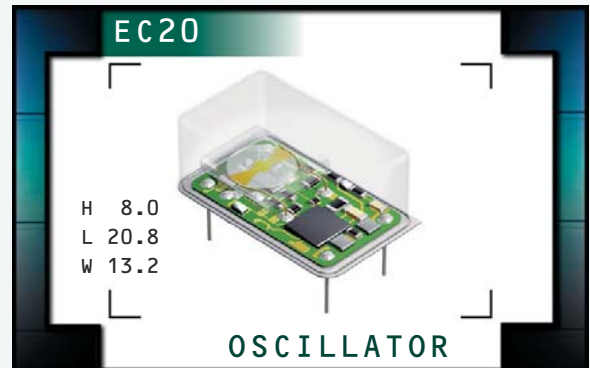
Best Regards,



Mark W. Stoner
Vice President of Marketing
Ecliptek Corporation

EC20 Series

- RoHS Compliant (Pb-free)
- HCMOS output
- 3.3V supply voltage
- 14 pin DIP package
- Stability to ± 5 ppm
- Custom lead length, gull wing options available



OBSOLETE

ELECTRICAL SPECIFICATIONS

Frequency Range (MHz)	1.000MHz to 50.000MHz	
Operating Temperature Range	Per Table 1	
Storage Temperature Range	-55°C to 125°C	
Supply Voltage (V_{DD})	3.3V _{DC} $\pm 10\%$	
Input Current	1.000MHz to 20.000MHz	10mA Maximum
	20.001MHz to 50.000MHz	20mA Maximum
Frequency Tolerance / Stability	vs. Operating Temperature Range	Per Table 1
	vs. Input Voltage (V _{DD} $\pm 5\%$)	± 2.0 ppm Maximum
	vs. Load (± 2 pF)	± 1.0 ppm Maximum
Internal Trim (Top of Can)	± 5 ppm Minimum	
Output Voltage Logic High (V_{OH})	w/HCMOS Load	2.7V _{DC} Minimum I _{OH} = -8mA
Output Voltage Logic Low (V_{OL})	w/HCMOS Load	0.5V _{DC} Maximum I _{OL} = +8mA
Rise Time / Fall Time	10% to 90% of Waveform ≤ 20.000 MHz	10 nSeconds Maximum
	10% to 90% of Waveform > 20.000 MHz	6 nSeconds Maximum
Duty Cycle	at 50% of Waveform	50 $\pm 10\%$ (Standard) or 50 $\pm 5\%$ (Optional)
Load Drive Capability	15pF HCMOS Load	
Tri-State Input Voltage	V _{IH} : No Connection	Enables Output
	V _{IH} : $\geq 2.2V_{DC}$	Enables Output
	V _{IL} : $\leq 0.8V_{DC}$	Disables Output: High Impedance
Aging (at 25°C)	± 1 ppm / year Maximum	
Start Up Time	10 mSeconds Maximum	
Period Jitter: Absolute	± 100 pSeconds Maximum	
Period Jitter: One Sigma	± 25 pSeconds Maximum	

MANUFACTURER ECLIPTEK CORP.	CATEGORY OSCILLATOR	SERIES EC20	PACKAGE 14 pin DIP	VOLTAGE 3.3V	CLASS 0561	REV. DATE 08/06
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PART NUMBERING GUIDE

EC20 07 A R TS - 24.000M - CL125

FREQUENCY STABILITY
2 Digit Code Per Table 1

OPERATING TEMPERATURE RANGE
1 Letter Code Per Table 1

INTERNAL TRIM OPTIONS
Blank=No Internal Trim
R=±5ppm Minimum (Top of Can)

DUTY CYCLE
Blank=50 ±10(%) (Standard)
T=50 ±5(%)

AVAILABLE OPTIONS

Blank=None (Standard)
CLXXX=Custom Lead Length (See Page 133)
G=Full Size Gull Wing (See Page 132)

FREQUENCY

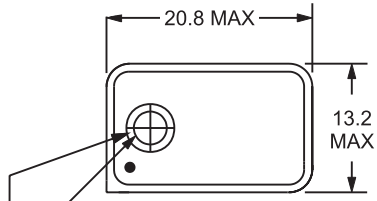
OUTPUT CONTROL FUNCTION
TS=Tri-State Enable High

OBSOLETE

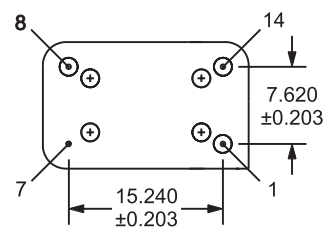
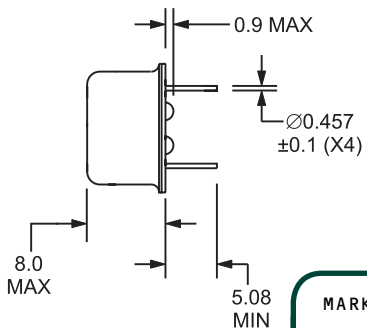
TABLE 1: PART NUMBERING CODES

Operating Temperature Range	Code	Frequency Stability				
		X = Availability with Internal Trim Option "Blank" Y = Availability with Internal Trim Option "R"				
		±5ppm	±7ppm	±10ppm	±15ppm	±20ppm
0°C to +50°C	A	Y	X, Y	X, Y	X, Y	X, Y
-10°C to +60°C	B		X, Y	X, Y	X, Y	X, Y
-20°C to +70°C	C			X, Y	X, Y	X, Y
-40°C to +85°C	D					X, Y

MECHANICAL DIMENSIONS
ALL DIMENSIONS IN MILLIMETERS



Internal Trim Hole (not present when Internal Trim is specified as "Blank")
Internal Trim Hole is covered by a sticker.



Pin 1: Tri-State
Pin 7: Case Ground
Pin 8: Output
Pin 14: Supply Voltage

MARKING SPECIFICATIONS

Line 1: ECLIPTEK
Line 2: EC20 TS
 — Output Control Function
 TS = Tri-State Enable High
 — Series Designator
Line 3: XX.XXX M
 — Frequency in MHz
 (5 Digits Maximum + Decimal)
Line 4: XX Y ZZ
 — Week of Year
 — Last Digit of Year
 — Ecliptek Manufacturing Identifier
Note: Pin 1 shall be designated with a dot

ENVIRONMENTAL/MECHANICAL SPECIFICATIONS

Characteristic	Specification
Mechanical Shock	MIL-STD-202, Method 213, Condition C
Vibration	MIL-STD-883, Method 2007, Condition A
Lead Integrity	MIL-STD-883, Method 2004
Solderability	MIL-STD-883, Method 2002
Temperature Cycling	MIL-STD-883, Method 1010
Resistance to Soldering Heat	MIL-STD-883, Method 210
Resistance to Solvents	MIL-STD-883, Method 215

MANUFACTURER ECLIPTEK CORP.	CATEGORY OSCILLATOR	SERIES EC20	PACKAGE 14 pin DIP	VOLTAGE 3.3V	CLASS OS61	REV. DATE 08/06
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