

## Marketing Bulletin

**DATE:** July 20<sup>th</sup>, 2006  
**TO:** All Sales Personnel  
**FROM:** Isaac Gonzalez  
**RE:** Product Termination

To all concerned parties,

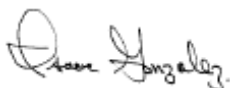
This bulletin is to notify all customers of the discontinuation of the following Ecliptek series effective July 20<sup>th</sup>, 2006:

<b>Series</b>	<b>Description</b>	<b>Recommended Replacement</b>
EC7	UM-1 Crystal	<a href="#">E1M</a> or <a href="#">E5M</a>

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 September 31<sup>st</sup>, 2006, with delivery to conclude by December 31<sup>st</sup>, 2006.

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

Best Regards,

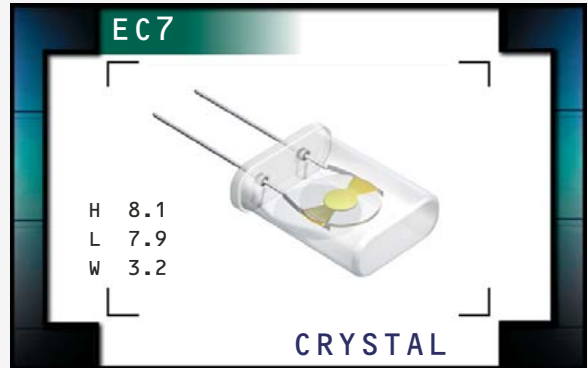


Isaac Gonzalez  
Configuration Manager  
Ecliptek Corporation

# EC7 Series



- RoHS Compliant (Pb-Free)
- Inverted Mesa Crystal
- Fundamental mode frequencies to 212.5MHz
- UM-1 package
- AT cut
- Tight tolerance/stability
- Wide operating temperature range



## NOTES

OBSOLETE

### ELECTRICAL SPECIFICATIONS

Frequency Range	44.737MHz to 212.500MHz
Frequency Tolerance / Stability	±50ppm / ±100ppm, ±30ppm/±50ppm
Over Operating Temperature Range	±15ppm / ±30ppm, or ±10ppm / ±30ppm
Operating Temperature Range	0°C to 70°C, -20°C to 70°C, or -40°C to 85°C
Aging (at 25°C)	±3ppm / year Maximum
Storage Temperature Range	-40°C to 85°C
Shunt Capacitance	5pF Maximum
Drive Level	100µWatts Maximum
Load Capacitance (C <sub>L</sub> )	18pF (Standard), Custom C <sub>L</sub> ≥ 10pF, or Series Resonant
Motional Capacitance (C <sub>1</sub> )	3fF Min, 10fF Max (F <sub>0</sub> ≤ 100MHz), 3fF Min, 13fF Max (F <sub>0</sub> > 100MHz)
Insulation Resistance	500 Megaohms Minimum at 100V <sub>DC</sub>

### EQUIVALENT SERIES RESISTANCE (ESR), MODE OF OPERATION (MODE), AND CUT

Frequency Range	ESR (Ω)	Mode / Cut	Frequency Range	ESR (Ω)	Mode / Cut
44.737MHz to 50.000MHz	25 Max	Fundamental / AT	100.001MHz to 160.000MHz	35 Max	Fundamental / AT
50.001MHz to 100.000MHz	30 Max	Fundamental / AT	160.001MHz to 212.500MHz	40 Max	Fundamental / AT

MANUFACTURER  
ECLIPTEK CORP.

CATEGORY  
CRYSTAL

SERIES  
EC7

PACKAGE  
UM-1

CLASS  
CR36

REV. DATE  
03/06

## PART NUMBERING GUIDE

### EC7 A - 20 - 35.000M

#### FREQUENCY TOLERANCE / STABILITY

Blank=±50ppm at 25°C, ±100ppm from 0°C to 70°C  
 A=±50ppm at 25°C, ±100ppm from -20°C to 70°C  
 B=±50ppm at 25°C, ±100ppm from -40°C to 85°C  
 C=±30ppm at 25°C, ±50ppm from 0°C to 70°C  
 D=±30ppm at 25°C, ±50ppm from -20°C to 70°C  
 E=±30ppm at 25°C, ±50ppm from -40°C to 85°C  
 F=±15ppm at 25°C, ±30ppm from 0°C to 70°C  
 G=±15ppm at 25°C, ±30ppm from -20°C to 70°C  
 H=±15ppm at 25°C, ±30ppm from -40°C to 85°C  
 J=±10ppm at 25°C, ±30ppm from 0°C to 70°C  
 K=±10ppm at 25°C, ±30ppm from -20°C to 70°C  
 L=±10ppm at 25°C, ±30ppm from -40°C to 85°C

#### FREQUENCY

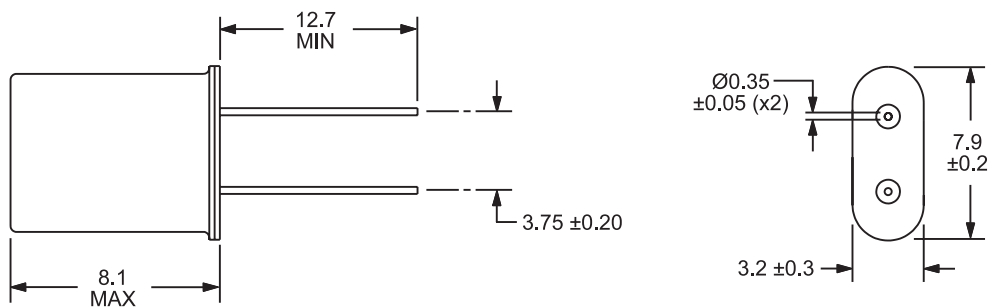
#### LOAD CAPACITANCE

Blank=18pF (Standard)  
 S=Series, XX=XXpF (Custom)

## NOTES

OBSOLETE

#### MECHANICAL DIMENSIONS ALL DIMENSIONS IN MILLIMETERS



#### ENVIRONMENTAL/MECHANICAL SPECIFICATIONS

PARAMETER	SPECIFICATION
Seal Integrity	Bubble test in Perfluorocarbon at +125°C ±5°C for 60 seconds minimum.
Solderability	Sn63 Solder dip at +230°C ±5°C for 5 seconds/95% coverage.
Marking Permanency	10 Strokes with brush after 1 minute soak in solvent, 3 times.
Shock	Random drop on hard wooden plate 3 times from a height of 50cm.
Vibration	Frequency with an amplitude of 1.5mm sweeping between 10Hz to 55Hz within 1 minute (approximately) for 2 hours minimum on each axis (X,Y and Z) for a total of 6 hours.

#### MARKING SPECIFICATIONS

Line 1: ECLIPTEK  
 Line 2: XX.XXXM  
 Frequency in MHz (5 Digits Maximum + Decimal)  
 Line 3: XX  
 Ecliptek Manufacturing Identifier

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