

Marketing Bulletin

DATE: November 21st, 2008

TO: All Sales Personnel

FROM: Isaac Gonzalez

RE: Product Termination

To all concerned parties,

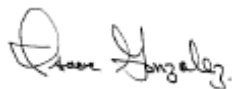
This bulletin is to notify all customers of the discontinuation of the following Ecliptek series effective November 21st, 2008:

Series	Description	Recommended Replacement
E5M	RoHS Compliant (Pb-free) Resistance Welded UM-5 Crystal	ECCM1 or EU

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 May 1st, 2009, with delivery to conclude by August 1st, 2009.

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

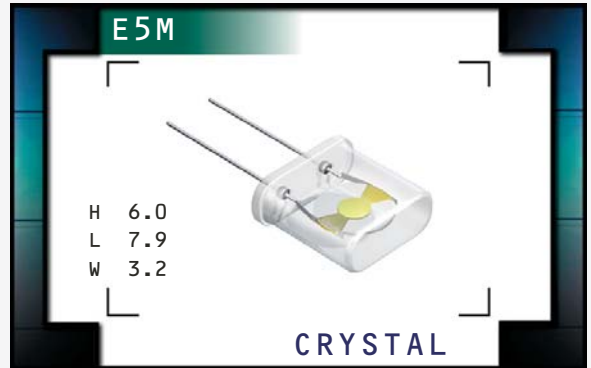
Best Regards,



Isaac Gonzalez
Configuration Manager
Ecliptek Corporation

E5M Series

- RoHS Compliant (Pb-Free)
- UM-5 package
- AT cut
- Tight tolerance/stability
- Frequencies to 150.000MHz available



OBSOLETE

TABLE 1: PART NUMBERING CODES

FREQUENCY STABILITY	Code	OPERATING TEMPERATURE RANGE		
		0°C to 50°C	-20°C to 70°C	-40°C to 85°C
		A	B	C
±10ppm	B	X	X	N/A
±15ppm	C	X	X	X
±30ppm	D	X	X	X

ELECTRICAL SPECIFICATIONS

Frequency Range	10.000MHz to 150.000MHz
Frequency Tolerance	±10ppm or ±15ppm
Frequency Stability	Per Table 1
Operating Temperature Range	Per Table 1
Aging (at 25°C)	±1ppm / year Maximum
Storage Temperature Range	-55°C to 125°C
Shunt Capacitance	7pF Maximum
Insulation Resistance	500 Megaohms Minimum at 100V _{DC}
Load Capacitance (C _L)	8pF Parallel Resonant to 50pF Parallel Resonant, or Series Resonant

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

Frequency Range	ESR (Ω)	Mode / Cut	Drive Level (μW)
10.000MHz to 15.999MHz	50 Maximum	Fundamental / AT	50 Maximum
16.000MHz to 60.000MHz	40 Maximum	Fundamental / AT	10 Maximum
30.000MHz to 150.000MHz	70 Maximum	Third Overtone / AT	100 Maximum
80.000MHz to 100.000MHz	150 Maximum	Fifth Overtone / AT	100 Maximum
100.001MHz to 120.000MHz	120 Maximum	Fifth Overtone / AT	100 Maximum
120.001MHz to 150.000MHz	100 Maximum	Fifth Overtone / AT	100 Maximum

MANUFACTURER
ECLIPTEK CORP.

CATEGORY
CRYSTAL

SERIES
E5M

PACKAGE
UM-5

CLASS
CR12

REV. DATE
03/08

PART NUMBERING GUIDE

E5M 2 C B A 20 - 30.000M

FREQUENCY TOLERANCE (AT 25°C)

2=±10ppm
3= ±15ppm

FREQUENCY STABILITY

B=±10ppm
C=±15ppm
D=±30ppm

OPERATING TEMPERATURE RANGE

A=0°C to 50°C
B=-20°C to 70°C
C=-40°C to 85°C

FREQUENCY

LOAD CAPACITANCE

S=Series Resonant
XX=8pF Parallel Resonant to 50pF Parallel Resonant

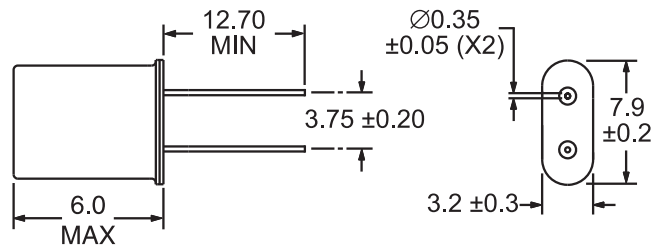
MODE OF OPERATION

A=Fundamental
B=Third Overtone
C=Fifth Overtone

NOTES

OBSOLETE

MECHANICAL DIMENSIONS
ALL DIMENSIONS IN MILLIMETERS



ENVIRONMENTAL/MECHANICAL SPECIFICATIONS

PARAMETER	SPECIFICATION
ESD Susceptibility	MIL-STD-883, Method 3015, Class 1, HBM: 1500V
Fine Leak Test	MIL-STD-883, Method 1014, Condition A
Flammability	UL94-V0
Gross Leak Test	MIL-STD-883, Method 1014, Condition C
Lead Integrity	MIL-STD-833, Method 2004
Mechanical Shock	MIL-STD-202, Method 213, Condition C
Moisture Resistance	MIL-STD-883, Method 1004
Moisture Sensitivity	J-STD-020, MSL 1
Resistance to Soldering Heat	MIL-STD-202, Method 210, Condition K
Resistance to Solvents	MIL-STD-202, Method 215
Solderability	MIL-STD-883, Method 2003
Temperature Cycling	MIL-STD-883, Method 1010, Condition B
Vibration	MIL-STD-883, Method 2007, Condition A

MARKING SPECIFICATIONS

Line 1: E XX.XX — Frequency in MHz (4 Digits Maximum + Decimal)
Line 2: XXXXX — Ecliptek Manufacturing Identifier

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