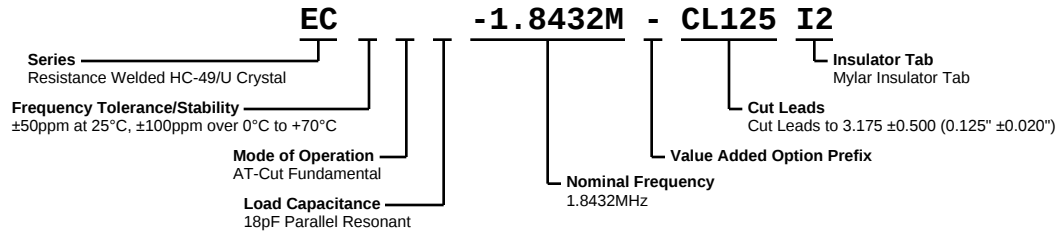


EC-1.8432M-CL125I2



ELECTRICAL SPECIFICATIONS

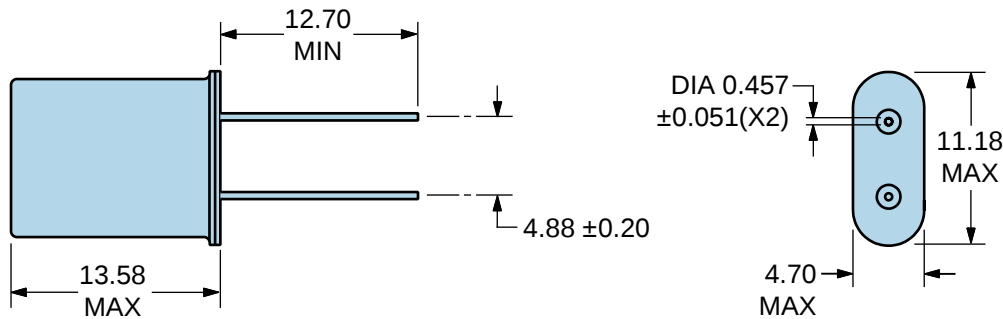
Nominal Frequency	1.8432MHz
Frequency Tolerance/Stability	$\pm 50\text{ppm}$ at 25°C, $\pm 100\text{ppm}$ over 0°C to +70°C
Aging at 25°C	$\pm 5\text{ppm/year}$ Maximum
Load Capacitance	125pF Parallel Resonant
Shunt Capacitance (C0)	7pF Maximum
Equivalent Series Resistance	650 Ohms Maximum
Mode of Operation	AT-Cut Fundamental
Drive Level	2mWatts Maximum
Storage Temperature Range	-40°C to +85°C
Insulation Resistance	500 Megaohms Minimum at 100Vdc

ENVIRONMENTAL & MECHANICAL SPECIFICATIONS

Fine Leak Test	MIL-STD-883, Method 1014, Condition A
Gross Leak Test	MIL-STD-883, Method 1014, Condition C
Lead Integrity	MIL-STD-883, Method 2004
Mechanical Shock	MIL-STD-202, Method 213, Condition C
Resistance to Soldering Heat	MIL-STD-202, Method 210
Resistance to Solvents	MIL-STD-202, Method 215
Solderability	MIL-STD-883, Method 2003
Temperature Cycling	MIL-STD-883, Method 1010
Vibration	MIL-STD-883, Method 2007, Condition A

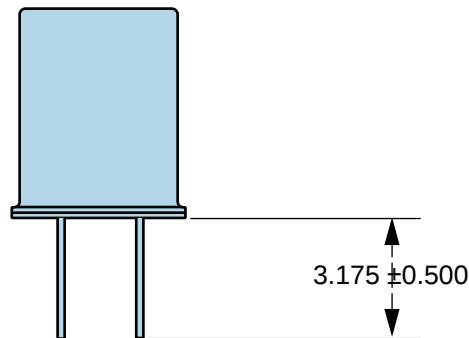
EC-1.8432M-CL125I2

MECHANICAL DIMENSIONS (all dimensions in millimeters)



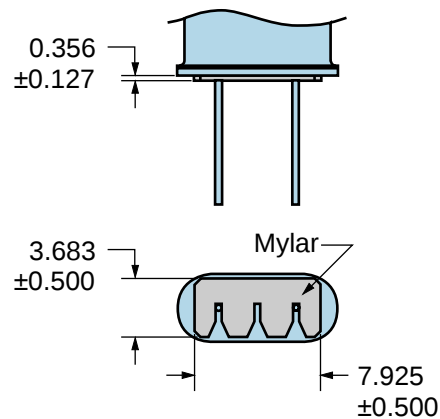
LINE	MARKING
1	ECLIPTEK
2	E1.8432M E=Ecliptek Designator or Blank (No Marking)
3	XX XX=Ecliptek Manufacturing Code

Value Added Option - Cut Leads



All dimensions are in millimeters

Value Added Option - Mylar Insulator Tab



All dimensions are in millimeters

Recommended Solder Reflow Methods



High Temperature Solder Bath (Wave Solder)

Ts MAX to Tl (Ramp-up Rate) 3°C/second Maximum

Preheat

- Temperature Minimum (Ts MIN) 150°C
- Temperature Typical (Ts TYP) 175°C
- Temperature Maximum (Ts MAX) 200°C
- Time (ts MIN) 60 - 180 Seconds

Ramp-up Rate (Tl to Tp) 3°C/second Maximum

Time Maintained Above:

- Temperature (Tl) 217°C
- Time (tL) 60 - 150 Seconds

Peak Temperature (Tp) 260°C Maximum for 10 Seconds Maximum

Target Peak Temperature (Tp Target) 250°C +0/-5°C

Time within 5°C of actual peak (tp) 20 - 40 seconds

Ramp-down Rate 6°C/second Maximum

Time 25°C to Peak Temperature (t) 8 minutes Maximum

Moisture Sensitivity Level Level 1

Recommended Solder Reflow Methods



Low Temperature Solder Bath (Wave Solder)

Ts MAX to TL (Ramp-up Rate) 5°C/second Maximum

Preheat

- Temperature Minimum (Ts MIN) N/A
- Temperature Typical (Ts TYP) 150°C
- Temperature Maximum (Ts MAX) N/A
- Time (ts MIN) 30 - 60 Seconds

Ramp-up Rate (TL to Tp) 5°C/second Maximum

Time Maintained Above:

- Temperature (TL) 150°C
- Time (tL) 200 Seconds Maximum

Peak Temperature (Tp) 245°C Maximum

Target Peak Temperature (Tp Target) 245°C Maximum 1 Time / 235°C Maximum 2 Times

Time within 5°C of actual peak (tp) 5 seconds Maximum 1 Time / 15 seconds Maximum 2 Times

Ramp-down Rate 5°C/second Maximum

Time 25°C to Peak Temperature (t) N/A

Moisture Sensitivity Level Level 1

Low Temperature Manual Soldering

185°C Maximum for 10 seconds Maximum, 2 times Maximum.

High Temperature Manual Soldering

260°C Maximum for 5 seconds Maximum, 2 times Maximum.