

EC2B-4.9152M TR



ITEM DESCRIPTION

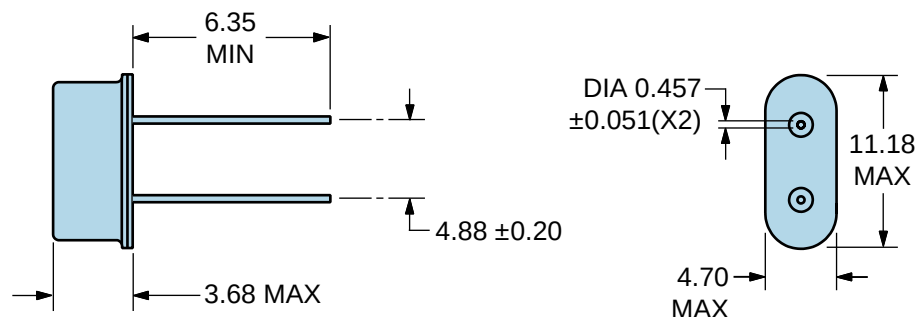
Quartz Crystal Resonator HC49/US Thru-Hole 3.68mm Height Metal Resistance Weld Seal 4.9152MHz ± 50 ppm at 25°C, ± 100 ppm over -40°C to +85°C 18pF Parallel Resonant

ELECTRICAL SPECIFICATIONS

Nominal Frequency	4.9152MHz
Frequency Tolerance/Stability	± 50 ppm at 25°C, ± 100 ppm over -40°C to +85°C
Aging at 25°C	± 5 ppm/year Maximum
Load Capacitance	18pF Parallel Resonant
Shunt Capacitance (C0)	7pF Maximum
Equivalent Series Resistance	200 Ohms Maximum
Mode of Operation	AT-Cut Fundamental
Drive Level	1mWatt Maximum
Storage Temperature Range	-40°C to +85°C
Insulation Resistance	500 Megaohms Minimum at 100Vdc

ENVIRONMENTAL & MECHANICAL SPECIFICATIONS

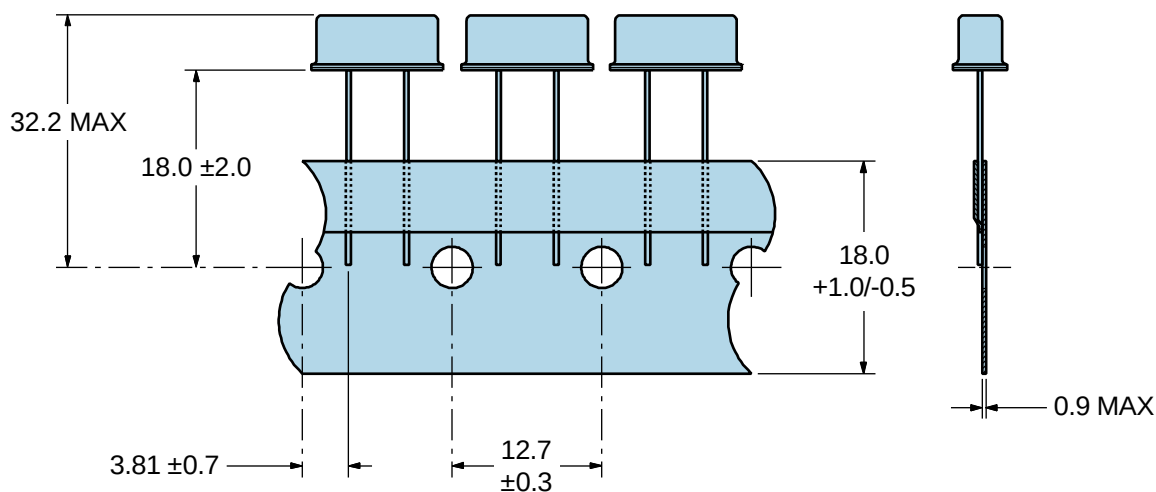
Fine Leak Test	MIL-STD-883, Method 1014 Condition A
Gross Leak Test	MIL-STD-883, Method 1014 Condition C
Lead Integrity	MIL-STD-883, Method 2004
Mechanical Shock	MIL-STD-202, Method 213 Condition C
Resistance to Soldering Heat	MIL-STD-202, Method 210
Resistance to Solvents	MIL-STD-202, Method 215
Solderability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

EC2B-4.9152M TR **MECHANICAL DIMENSIONS (all dimensions in millimeters)**

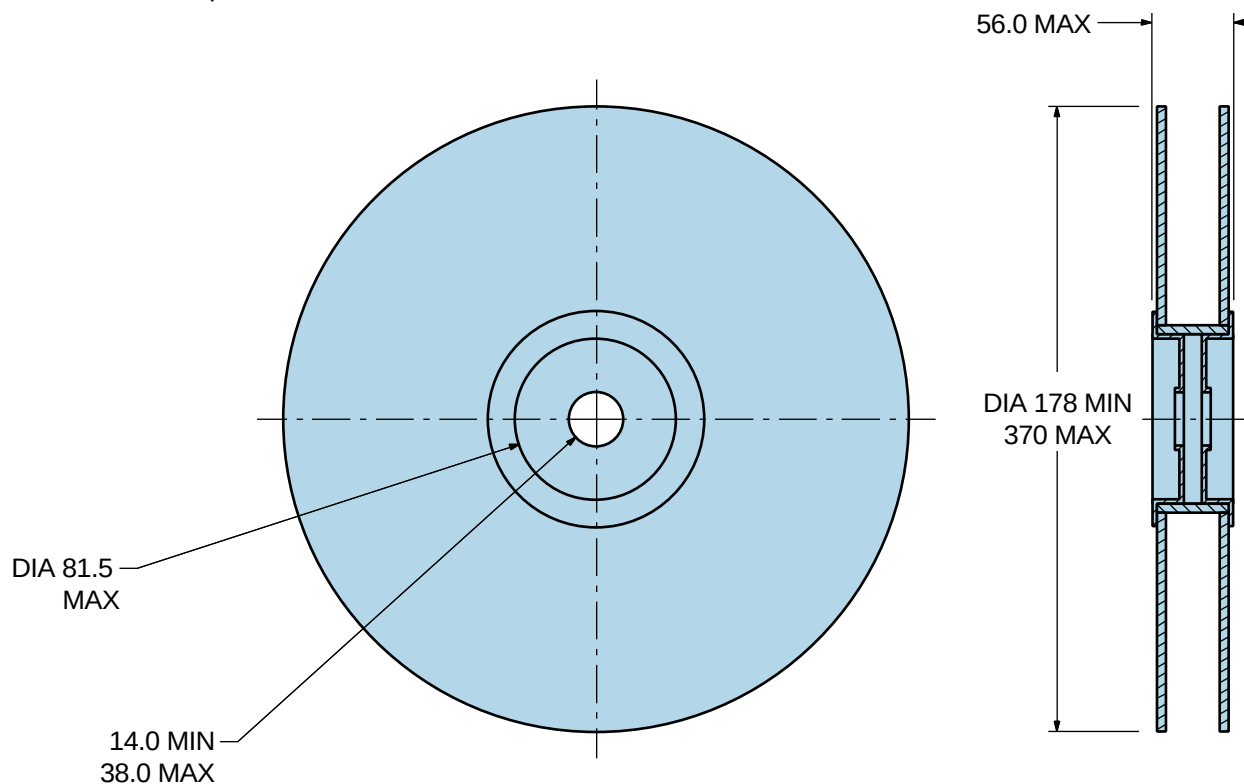
LINE	MARKING
1	E4.9152M <i>E=EclipseTek Designator</i> <i>M=Frequency Unit of Measure</i>

EC2B-4.9152M TR**Tape & Reel Dimensions**

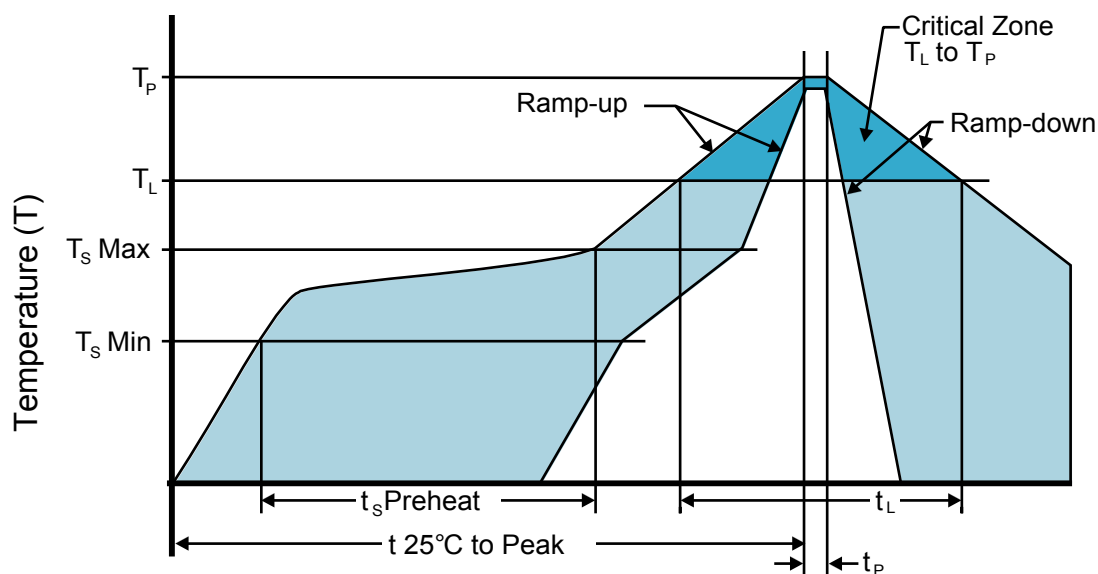
All Dimensions in Millimeters
Compliant to EIA-481



*Compliant to EIA 468B



Recommended Solder Reflow Methods



High Temperature Solder Bath (Wave Solder) Time (t)

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

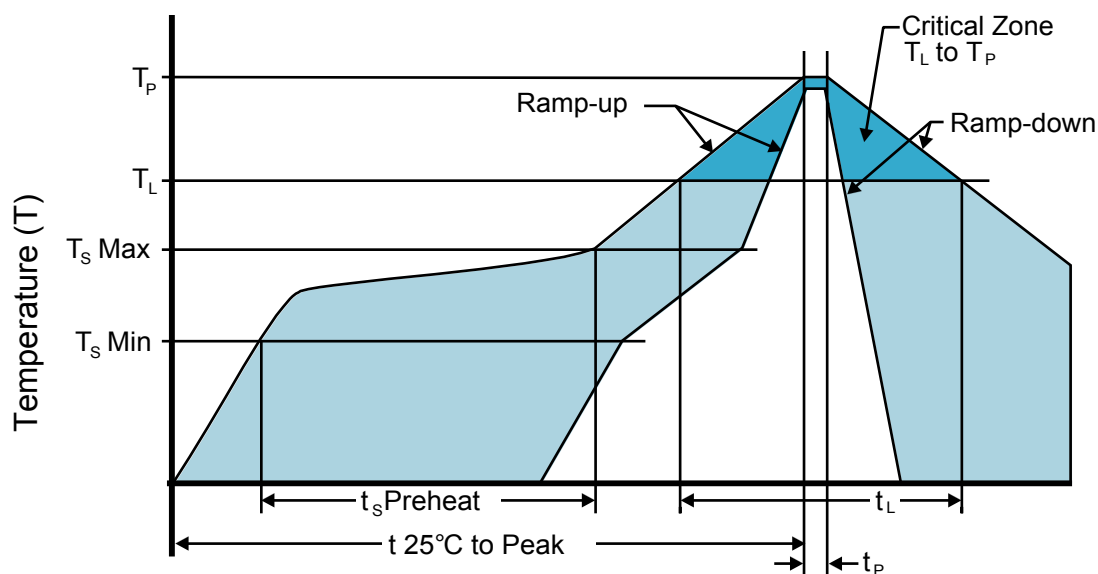
Time within 5°C of actual peak (tp) 20 - 40 Seconds

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) Time (t)

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.