



ORDERING INFORMATION

PART IDENTIFIER: SMT2010F

ASSEMBLY DWG: 1101894

SPECIFICATIONS

1. ELECTRICAL:

Impedance: 50 Ω Nominal.

Frequency: DC - 2 GHz.

VSWR: 1.25:1 Max.

Input Power: 30 Watts. Chip Soldered to Mounting Surface. Mounting Surface Temperature Maintained At 100°C Maximum. Apply Linear De-Rating of Input Power To 0 Watts At 150°C.

2. ENVIRONMENTAL:

Non-Operating: -55°C To +150°C.

Operating: -55°C To +150°C.

3. MARKING:

Unit Marking: None.

4. QUALITY ASSURANCE:

Sample Inspect Per ANSI/ASQC Z1.4 General Inspection, Level II, AQL = 1.0.

Visual And Mechanical Per 824W154.

Dc Resistance: 50 Ω ± 5 %.

Data Requirements:

No Test Data Required for Customer.

Data Retention – 24 Months.

5. PACKAGING:

Standard Packaging: Standard Packing Per 755W002.

6. MECHANICAL:

Thermal Impedance (R_θ):

1.667°C / Watt R_θ From Resist Film to Mounting Surface Directly Under Center of Chip. Chip Soldered Directly to Mounting Surface.



Film Temperature (T_F):

200°C Absolute Maximum Film Temperature. De-Rate To 150°C Maximum Film Temperature for All Military/High-Reliability Applications.

Thermal:

Determine Maximum Mounting Surface Temperature by Applying the Following Formula:

$$T_S = T_F - (P_{MAX} \times R_{\theta})$$

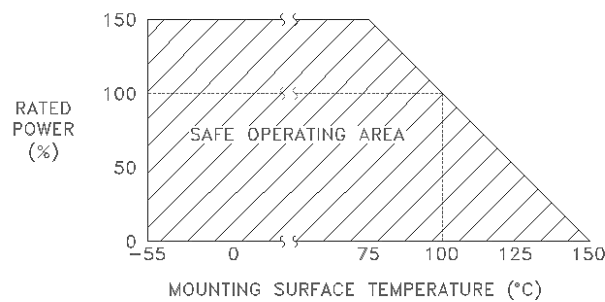
Where:

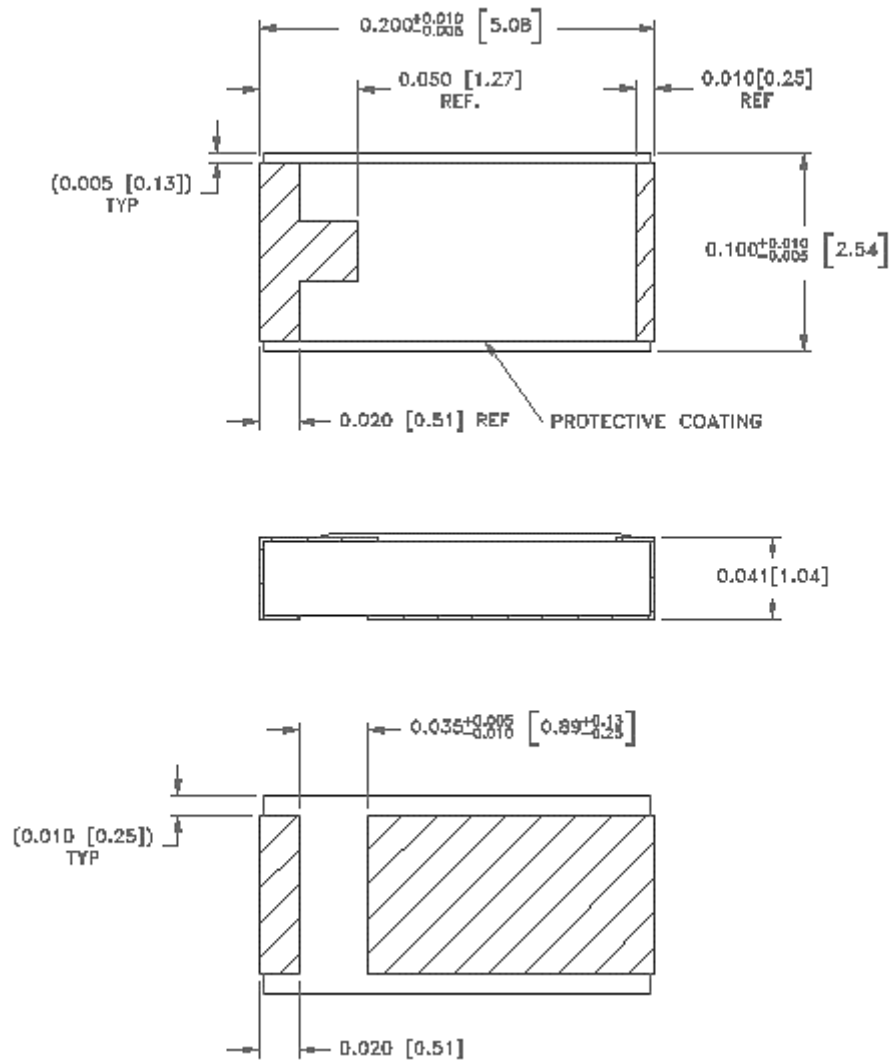
- T_S = Maximum Mounting Surface Temperature
- T_F = Maximum Film Temperature
- P_{MAX} = Maximum Applied Input Power
- R_θ = Chip Thermal Impedance.

Mechanical Specifications

- Workmanship: PER MIL-PRF-55342.
- Substrate: Beryllia, ASTM F356.
- Terminal & Ground Plane: Thick Film, Lead Free Plating, RoHS Compliant.
- Resist: Thick Film.

POWER RATING AND DERATING





Unless Otherwise Specified: TOLERANCE: X.XXX = ± 0.005.

Metric equivalents given in [mm] are for reference information only.