



ORDERING INFORMATION

PART IDENTIFIER: SMT2525ALNF

ASSEMBLY DWG: 1102004

SPECIFICATIONS

1. ELECTRICAL:

Impedance: 50 Ω Nominal.

Frequency: DC – 2 GHz.

VSWR: 1.25:1 Max.

Input Power: 60 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:

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 pack per 755W002.

6. MECHANICAL:

Workmanship: PER MIL-PRF-55342

Thermal Impedance (Rθ):

0.833°C / Watt Rθ From Resist Film to Mounting Surface Directly Under Center of Chip. Chip Soldered Directly to Mounting Surface.



Film Temperature (TF):

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:

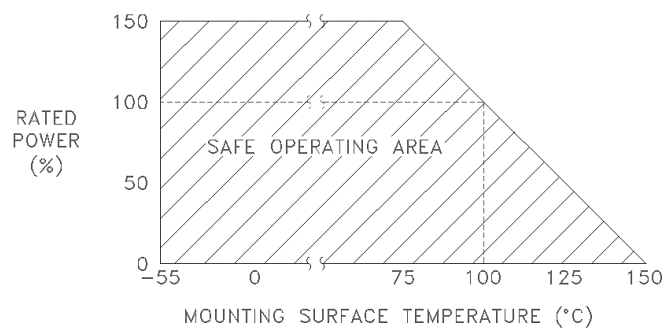
$$T_S = T_F - (P_{MAX} \times R_{\theta})$$

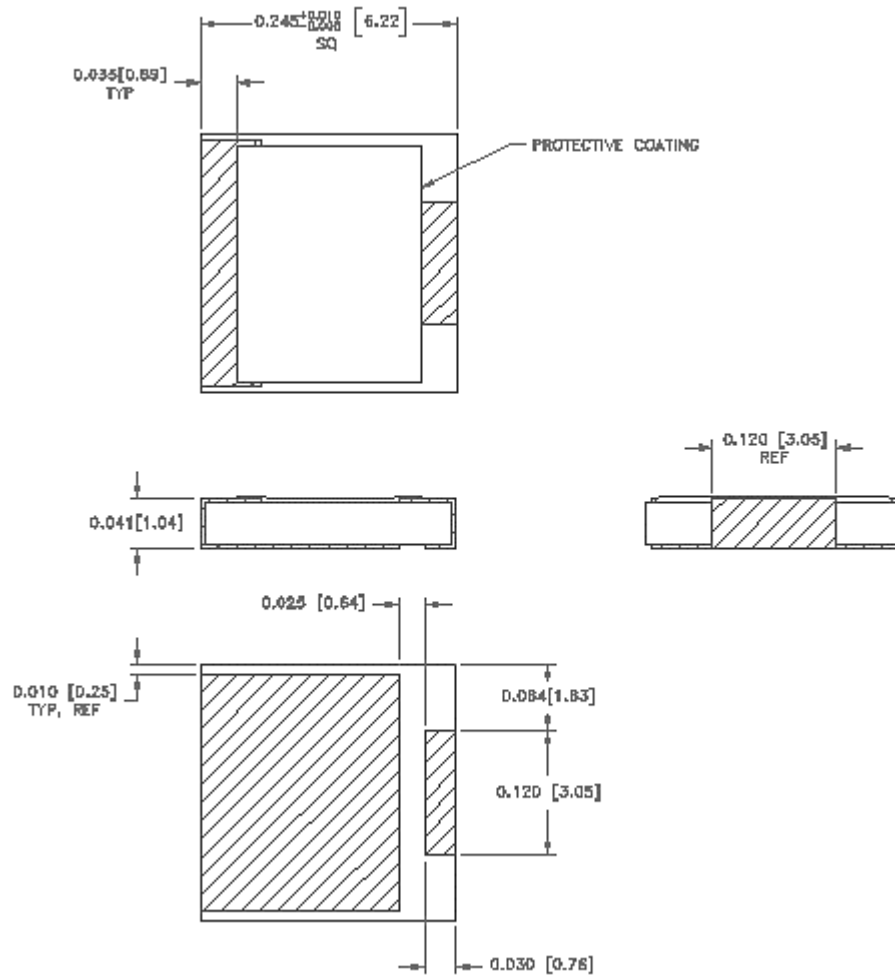
Where:

- T<sub>S</sub> = Maximum Mounting Surface Temperature
- T<sub>F</sub> = Maximum Film Temperature
- P<sub>MAX</sub> = Maximum Applied Input Power
- R<sub>θ</sub> = Chip Thermal Impedance.

- Substrate: Material-Aluminum Nitride, MIL-I-10.
- Terminals: Thick Film, Lead Free Plating. RoHS Compliant.
- Resist: Material- Thick Film.

POWER RATING AND DERATING





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