



ORDERING INFORMATION

PART IDENTIFIER: SMT3737TALNF

ASSEMBLY DWG: 1102054

SPECIFICATIONS

1. ELECTRICAL:

Impedance: 50 Ω Nominal.

Frequency: 800 MHz – 2700 MHz.

VSWR: 1.20:1 Max.

Input Power: 100 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 pack per 755W002.

6. MECHANICAL:

Workmanship: PER MIL-PRF-55342.

Thermal Impedance (R_θ):

0.500°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:

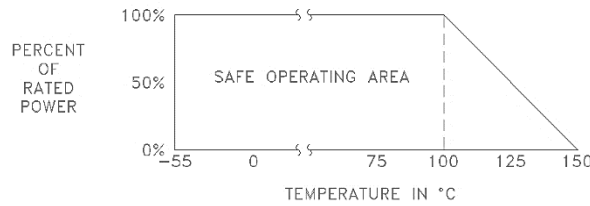
$$T_S = T_F - (P_{MAX} \times R_{\theta})$$

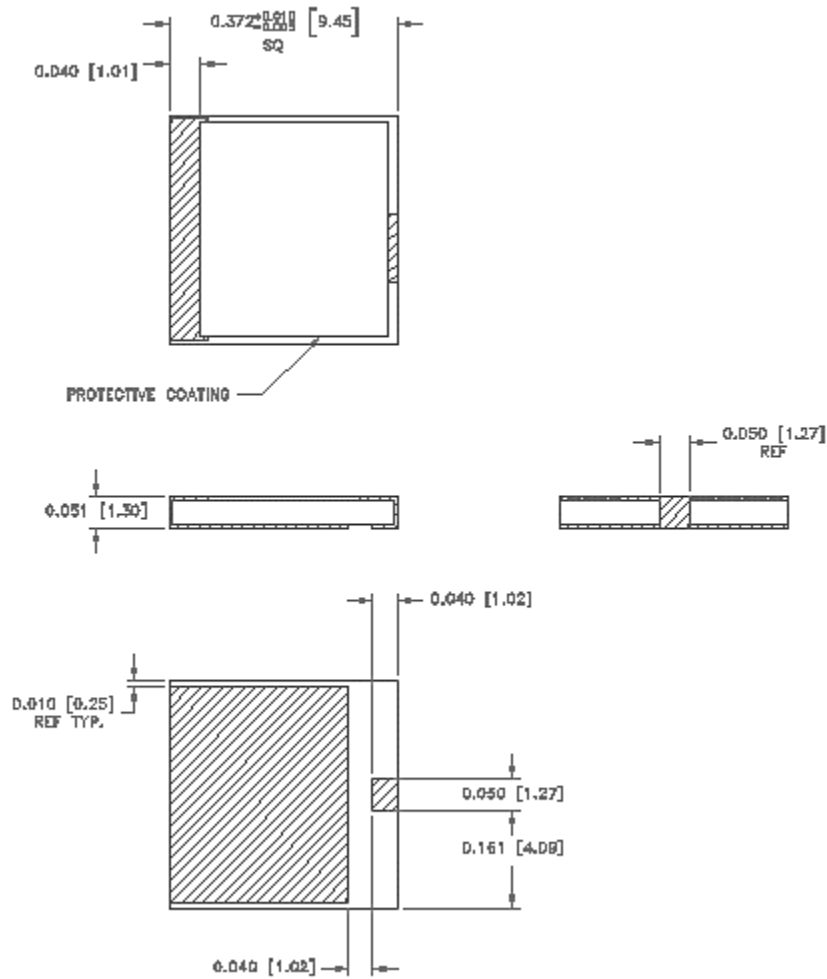
Where:

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

- Substrate: Material-Aluminum Nitride, MIL-I-10.
- Terminals: Thick Film, Nickel Barrier, RoHS Compliant.
- Resist: Material- Thick Film.

POWER RATING AND DERATING





Unless Otherwise Specified:

TOLERANCE: X.XXX = ± 0.005.