

ORDERING INFORMATION

PART IDENTIFIER: SMT2010TALN

ASSEMBLY DWG: 1101604

SPECIFICATIONS

1. ELECTRICAL:

| | |
|--------------|---|
| Impedance: | 50 Ω Nominal. |
| Frequency: | DC-4 GHz. |
| VSWR: | See Chart. |
| Input Power: | 20 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 \pm 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):

2.500°C / Watt R θ 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:

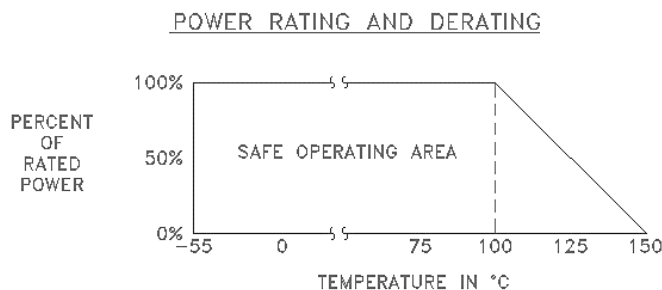
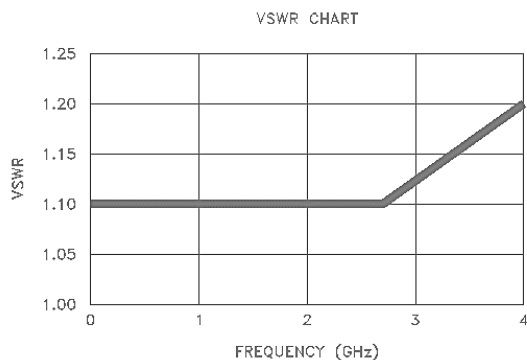
- T_S = Maximum Mounting Surface Temperature
- T_F = Maximum Film Temperature
- P_{MAX} = Maximum Applied Input Power
- R_θ = Chip Thermal Impedance.

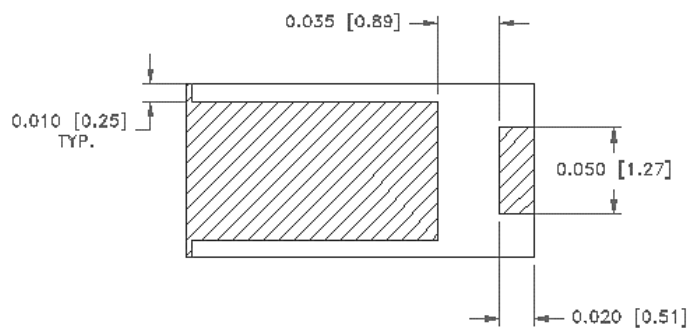
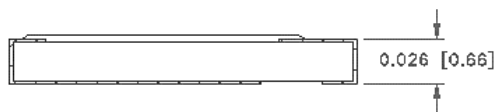
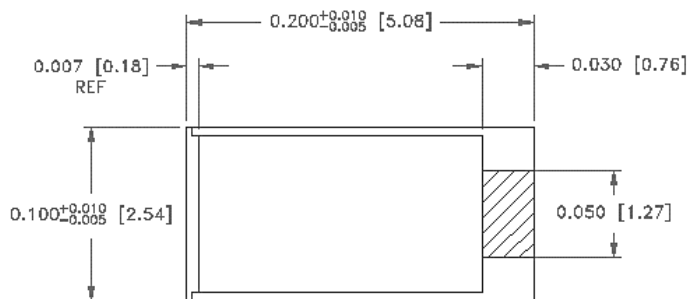
Substrate: Material-Aluminum Nitride, MIL-I-10.

Terminals: Thick Film, Nickel Barrier.

Solder Plated

Resist: Material- Thick Film.





Unless Otherwise Specified:

TOLERANCE: X.XXX = ± 0.005.