



## ORDERING INFORMATION

PART IDENTIFIER: SMT2525TALNF

ASSEMBLY DWG: 1102014

## SPECIFICATIONS

**1. ELECTRICAL:**

Impedance:	50 $\Omega$ Nominal.
Frequency:	DC – 4 GHz.
VSWR:	1.2:1 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:**

Unit Marking:	None.
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**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  $\Omega \pm 5\%$ .

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 $\theta$ ):

0.833°C / Watt R $\theta$  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:

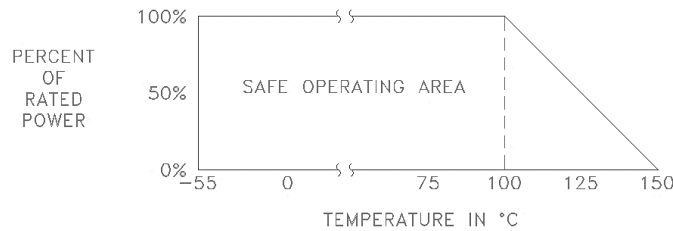
$$T_S = T_F - (P_{MAX} \times R_{\theta})$$

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, ASTM F356.
- Terminals: Thick Film, Lead Free Plating. RoHS Compliant.
- Resist: Material- Thick Film.

POWER RATING AND DERATING





SURFACE MOUNT TERMINATION, TUNED FOR TELECOM BANDS, LEAD FREE

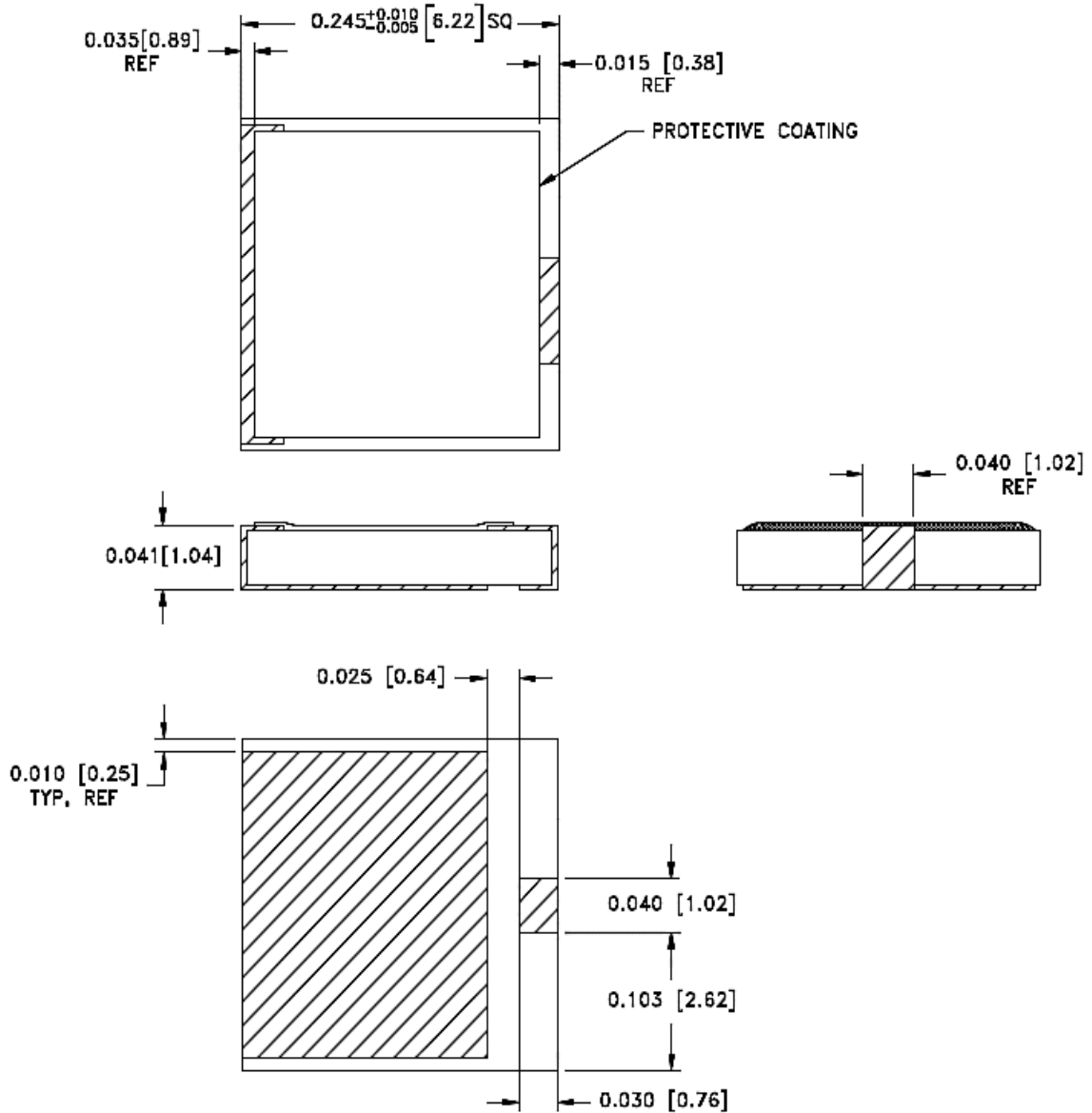
DATASHEET PART SERIES: SMT2525TALNF

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Revision C



Unless Otherwise Specified:

TOLERANCE: X.XXX = ± 0.005.