

## SURFACE MOUNT TERMINATION, BERYLLIA

DATASHEET PART SERIES: SMT2525

Sheet 1 of 3  
Doc# SMT2525-1008605ECO-085683  
Revision K

## ORDERING INFORMATION

PART IDENTIFIER: SMT2525

ASSEMBLY DWG: 1101174

## SPECIFICATIONS

**1. ELECTRICAL:**

Impedance:	50 $\Omega$ Nominal.
Frequency:	DC - 2 GHz.
VSWR:	1.25:1 MAX.
Input Power:	75 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  $\Omega$   $\pm$  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 $\theta$ ):

0.667°C / Watt R $\theta$  From Resist Film to Mounting Surface Directly Under Center of Chip. Chip Soldered Directly to Mounting Surface.

**SURFACE MOUNT TERMINATION, BERYLLIA**

**DATASHEET PART SERIES: SMT2525**

**Sheet 2 of 3  
Doc# SMT2525-1008605**

**ECO-085683  
Revision K**

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

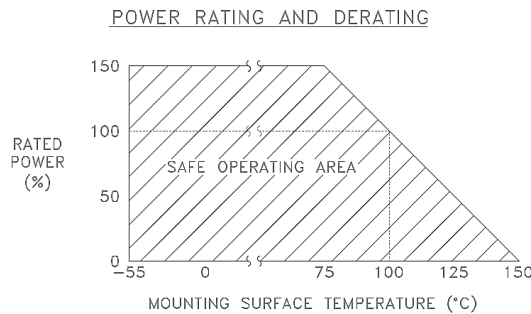
R<sub>θ</sub> = Chip Thermal Impedance.

Substrate: Material-Beryllia, ASTM F356

Terminals: Thick Film, Nickel Barrier.

Solder Plated

Resist: Material- Thick Film

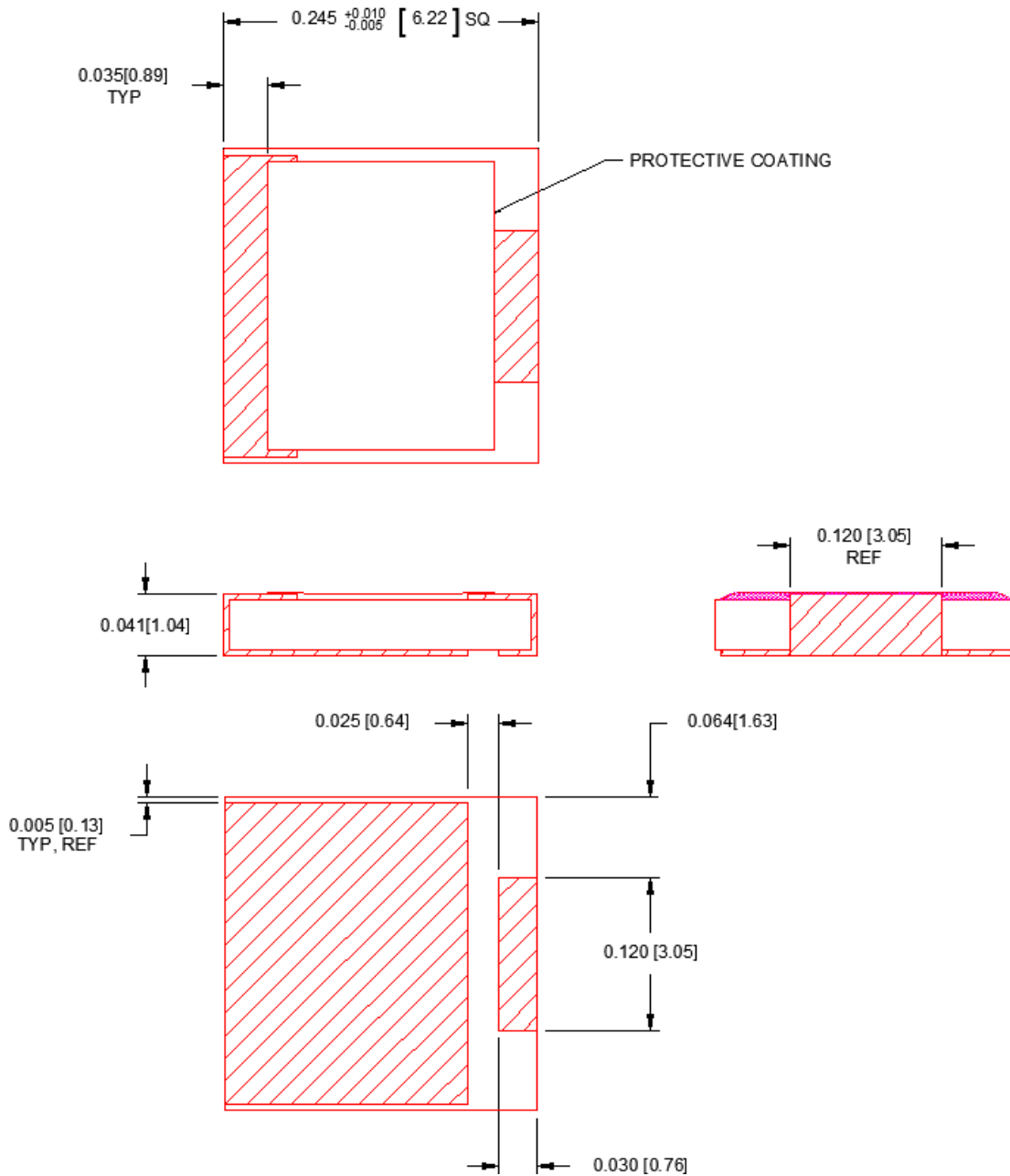


**SURFACE MOUNT TERMINATION, BERYLLIA**

DATASHEET PART SERIES: SMT2525

Sheet 3 of 3  
Doc# SMT2525-1008605

ECO-085683  
Revision K



Unless Otherwise Specified:

TOLERANCE: X.XXX = ± 0.005.