# ATTENUATOR CHIP 2 WATT



DATA SHEET PART SERIES: TS03XXW1

SHEET 1 OF 2 Dwg 1004105 EN 16-0604 Revision L

FEATURES APPLICATIONS

High Power Broadcast

Surface Mount High Power Amplifiers
Low VSWR Isolators/Circulators

Easy Installation Military

Wide Attenuation Offering Instrumentation



# **GENERAL DESCRIPTION**

Small Footprint

EMC Technology offers the widest selection of chip attenuators worldwide. Chip components are offered in Alumina, Aluminum Nitride, Beryllium Oxide, and CVD diamond for maximum performance.

### **ORDERING INFORMATION**

Part Identifier: TS03XXW1

(XX) - dB Value

Mobile Networks

### **SPECIFICATIONS**

# 1.0 ELECTRICAL

Nominal Impedance: 50 ohms Frequency Range: DC – 8 GHz

Attenuation Values Available: 1 – 20 in 1 dB increments

Attenuation Accuracy:

ATTENUATION ACCURACY		
dB	DC – 4 GHz	4 – 8 GHZ
1 – 3	±0.3	±0.5
4 – 6	±0.4	±0.5
7 – 10	±0.5	±0.5
11 – 15	±0.75	+0.5,-3.0
16 - 20	±1.0	+0.5,-4.0

Input Power CW: 2 Watts full rated power to 125°c, derated linearly to 0 watts at 150°c.

Peak Power: 50 watts for 10us pulse width @ 1% duty cycle.

VSWR: DC – 4 GHz - 1.25:1

4 - 8 GHz - 1.35:1

#### 2.0 ENVIRONMENTAL

Operating Temperature: -55°C to +150°C

Non-operating Temperature: -65°C to +150°C

Temperature Coefficient: +/-200 PPM / °C max

Altitude Non-Operating: Sea Level to 50,000 Feet.

Altitude Operating: Sea Level to 50,000 Feet.

Vibration: Per MIL-STD-202, METHOD 204, COND. D. Shock: Per MIL-STD-202, METHOD 213, COND. I.

Moisture Resistance:

Per MIL-STD-202, METHOD 106 Except Sub cycle Steps 7a and

7b. Polarization and Load Are Not Applicable.

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### 3.0 MARKING

Unit Marking: "dB Value"

### **4.0 QUALITY ASSURANCE**

Sample Inspect Per MIL-STD-105, Level II, 1.0% AQL.

Visual and Mechanical Inspection for Conformance to Outline Drawing

Measure Attenuation and VSWR

Data Retention - Standard

### 5.0 PACKAGING

Standard Packaging: Tape and Reel

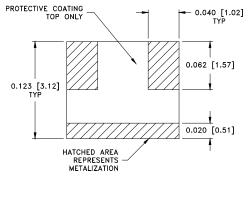
### **6.0 MECHANICAL**

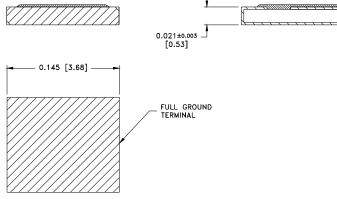
Resistive Film: Thin Film, Tantalum Nitride

Terminal Material: Thick Film, Nickel Barrier, Solder Plated

Metric Dimensions: Provided for reference only

Workmanship PER MIL-R-55342





Unless Otherwise Specified: TOLERANCE:  $X.XXX = \pm 0.005$