# TERMINATION
# CHIP OUTRIGGER 3 WATTS

## FEATURES

Wide Band Operation
High Power
Coplanar Waveguide Compatible
Low Capacitance
Easy Installation

## APPLICATIONS

Broadcast
High Power Filters
High Power Amplifiers
Isolators
Military
Instrumentation

## GENERAL DESCRIPTION

EMC Technology offers the widest selection of chip terminations worldwide. Chip components are offered in both thick and thin film resistive material and available in Alumina, Aluminum Nitride, Beryllium Oxide and CVD Diamond. CTH series feature EMC Technology's patented outrigger resistor technology (US 8, 994, 490) to offer substantially improved power handling over conventional resistors without compromising broadband performance.
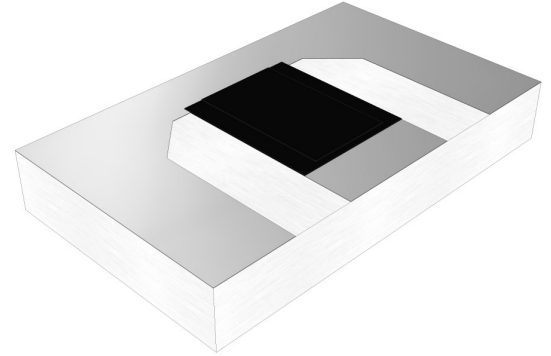
## ORDERING INFORMATION

**Part Identifier:  CTH0610F**

## SPECIFICATIONS

### 1.0 ELECTRICAL

| | |
|---|---|
| Nominal Impedance: | 50 ohms |
| Frequency Range: | DC - 12 GHz |
| VSWR: | DC - 6 GHz     1.25:1 |
| | 6 - 12 GHz     1.60:1 |
| Input Power CW: | 3 WATTS |
| Peak Power: | 20W, 10µs pulse width, 1% duty cycle |
| DC Resistance: | 50Ω ± 5% |

### 2.0 ENVIRONMENTAL

| | |
|---|---|
| Operating Temperature: | -55˚C to +150˚C |
| Non-operating Temperature: | -65˚C to +150˚C |
| Temperature Coefficient: | ± 200 PPM / ˚C Max |

### 3.0 MARKING

| | |
|---|---|
| Unit Marking: | DOT MARKING, EMC |

### 4.0 QUALITY ASSURANCE

| | |
|---|---|
| Visual and Mechanical Inspection: | Per 824W107 |
| DC Resistance Check: | 100% DC Resistance Check |
| Data Retention: | Standard |

### 5.0 PACKAGING

| | |
|---|---|
| Standard Packaging: | Tape and Reel |

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## 6.0 MECHANICAL

| | |
|---|---|
| Substrate Material: | Alumina 96% |
| Resistive Film: | Thick Film |
| Terminal Material: | Thick Film, Silver Plated |
| Metric Dimensions: | Provided for reference only |
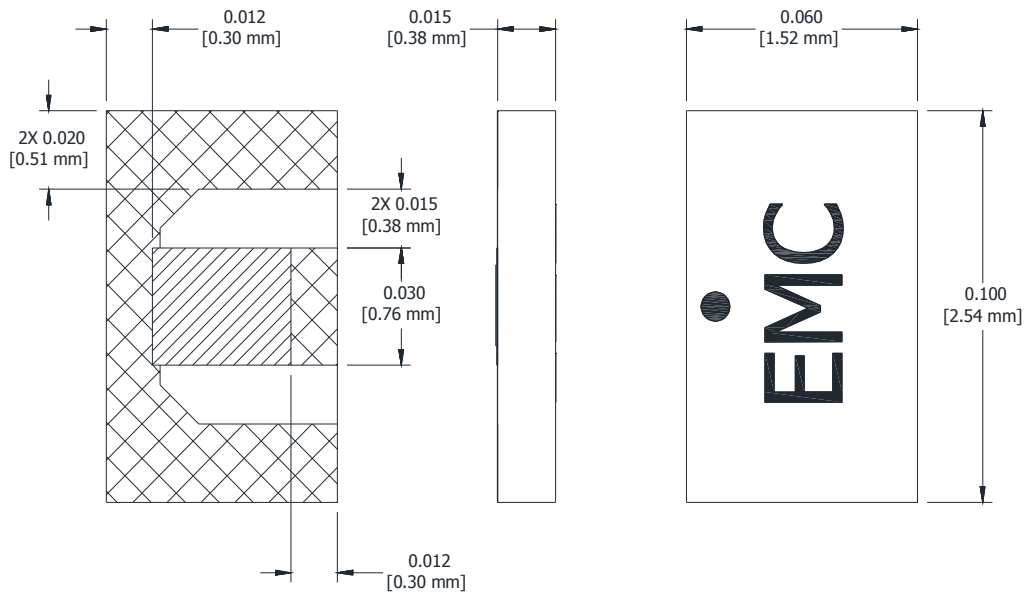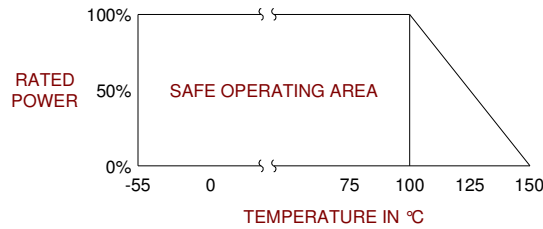
Unless Otherwise Specified:    TOLERANCE:  X.XX = ± 0.01    X.XXX = ± 0.005

**smiths microwave**    **Form 423F103    Rev-**    **Cage Codes: 24602 / 2Y194**    **www.emc-rflabs.com • +1 772-286-9300**
*Specifications are Subject to Change Without Notice*    *AS 9100, ISO 9001 and 14001 Certified*

# TERMINATION
# CHIP OUTRIGGER 3 WATTS

**DATA SHEET**      **PART SERIES: CTH0610F**

**SHEET 3 OF 3**
**Dwg 1015475**

**EN 16-0047**
**Revision -**

## 7.0 SUGGESTED MOUNTING
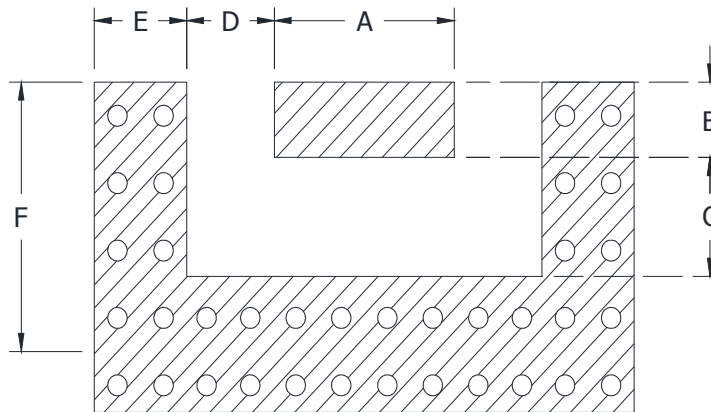


| DIMENSION | | | | | | | | | | | |
|-----------|---|---|---|---|---|---|---|---|---|---|---|
| INCHES | | | | | | METRIC (mm) | | | | | |
| A | B | C | D | E | F | A | B | C | D | E | F |
| 0.035 | 0.014 | 0.039 | 0.007 | 0.030 | 0.065 | 0.889 | 0.356 | 0.991 | 0.178 | 0.762 | 01.651 |