



**DESCRIPTION**

SRC Devices 3- electrode non-radioactive PMT8 GDT's are telecom grade gas-filled surge arresters. These devices are designed to meet the recommendations in CCITT-K12 and Bellcore GR-1361-CORE. The three electrode configuration is used in applications where simultaneous crowbar action of two signal lines is required. These components can be supplied with a fail-safe clip and are available with or without leads. PMT8 gas tubes function as switches which dissipate a minimum amount of energy and therefore handle currents that far surpass other types of transient voltage protection.

**APPLICATIONS**

- Telecom network interfaces
- Telephone line cards
- Repeaters
- Modems
- Line test equipment

**FEATURES**

- Non-radioactive
- Rugged ceramic-metal construction
- Low capacitance (<1pF)
- Available with fail-safe clip
- Available with or without leads
- Surface mount available
- Available in tube packaging
- Designed to meet CCITT-K12

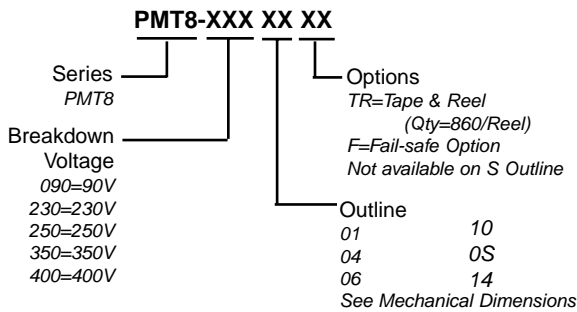
**APPROVALS**

- UL File: E145795 (UL497B)

**RATINGS @ 25°C**

**ORDERING INFORMATION**

A complete part number is represented by the digits below. For example, PMT8-09004F is a 90V device with mechanical outline 04 and a fail-safe clip.



Parameter	Min	Typ	Max	Units
DC Breakdown Voltage (line - ground)	72	90	113	V
	184	230	276	V
	200	250	300	V
	280	350	420	V
	320	400	480	V
Insulation Resistance	10 <sup>10</sup>	-	-	Ω
Capacitance (line - ground)	-	-	1	pF
Capacitance (line - line)	-	-	0.5	pF
Operational Temperature	-40	-	+125	°C

(See detailed specifications for more information.)

### 3 ELECTRODE NON-RADIOACTIVE SURGE ARRESTERS



#### PMT8 Series

#### SPECIFICATIONS

All characteristics at 25°C

PARAMETERS	CONDITIONS	SYMBOL	PMT8-090XX			PMT8-230XX			PMT8-250XX			UNITS
			MIN	TYP	MAX	MIN	TYP	MAX	MIN	TYP	MAX	
<b>Device Specifications</b>												
DC Breakdown (I-g)	500V/s	V <sub>BD(I-g)</sub>	72	90	113	184	230	276	200	250	300	V
DC Breakdown (I-l)	500V/s	V <sub>BD(I-l)</sub>	-	-	216	-	-	552	-	-	552	V
Impulse Breakdown (I-g)	100V/μs	V <sub>bd</sub>	-	-	500	-	-	500	-	-	500	V
	1kV/μs	V <sub>bd</sub>	-	-	800	-	-	800	-	-	800	V
Insulation Resistance	100V	IR	10 <sup>10</sup>	-	-	10 <sup>10</sup>	-	-	10 <sup>10</sup>	-	-	Ω
Capacitance (I-g)	1MHz	C (I-g)	-	-	1	-	-	1	-	-	1	pF
Capacitance (I-l)	1MHz	C (I-l)	-	-	0.5	-	-	0.5	-	-	0.5	pF
Arc Voltage	I=5A min	V <sub>ARC</sub>	-	25	-	-	25	-	-	25	-	V
<b>Life Ratings<sup>(1)</sup></b>												
Surge Life	100A (10/1000μs)		300	-	-	300	-	-	300	-	-	shots
Max Current Surge	10kA+10kA (8/20μs)		10	-	-	10	-	-	10	-	-	shots
AC Current	10x Isec @ 60Hz		-	-	10	-	-	10	-	-	10	A

(1)End-of-Life limits are:

DC: 50% of minimum initial DC Breakdown Voltage limit to 150% of maximum initial DC Breakdown Voltage limit  
Impulse: less than 150% of initial Impulse Breakdown Voltage limit.

(2) Can withstand immersion in 260°C surface mount solder process for 1 minute.

All characteristics at 25°C

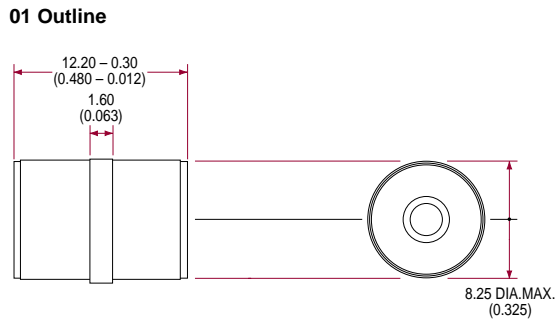
PARAMETERS	CONDITIONS	SYMBOL	PMT8-350XX			PMT8-400XX			UNITS
			MIN	TYP	MAX	MIN	TYP	MAX	
<b>Device Specifications</b>									
DC Breakdown (I-g)	500V/s	V <sub>BD(I-g)</sub>	280	350	420	320	400	480	V
DC Breakdown (I-l)	500V/s	V <sub>BD(I-l)</sub>	-	-	840	-	-	960	V
Impulse Breakdown (I-g)	100V/μs	V <sub>bd</sub>	-	-	600	-	-	750	V
	1kV/μs	V <sub>bd</sub>	-	-	900	-	-	1100	V
Insulation Resistance	100V	IR	10 <sup>10</sup>	-	-	10 <sup>10</sup>	-	-	Ω
Capacitance (I-g)	1MHz	C (I-g)	-	-	1	-	-	1	pF
Capacitance (I-l)	1MHz	C (I-l)	-	-	0.5	-	-	0.5	pF
Arc Voltage	I=5A min	V <sub>ARC</sub>	-	25	-	-	25	-	V
<b>Life Ratings<sup>(1)</sup></b>									
Surge Life	100A (10/1000μs)		300	-	-	300	-	-	shots
Max Current Surge	10kA+10kA (8/20μs)		10	-	-	10	-	-	shots
AC Current	10x Isec @ 60Hz		-	-	10	-	-	10	A

(1)End-of-Life limits are:

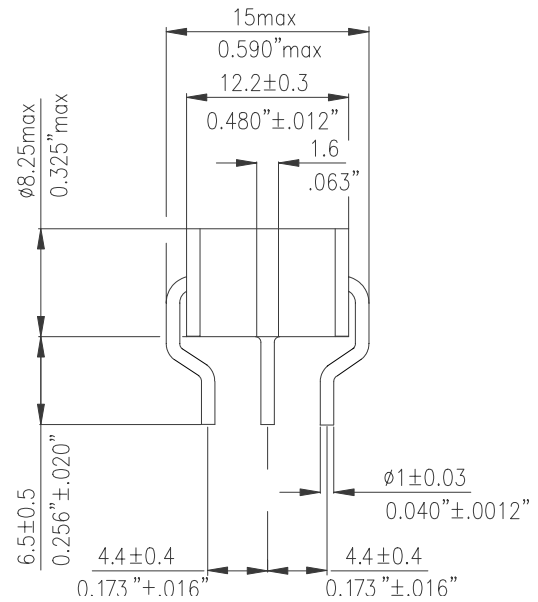
DC: 50% of minimum initial DC Breakdown Voltage limit to 150% of maximum initial DC Breakdown Voltage limit  
Impulse: less than 150% of initial Impulse Breakdown Voltage limit.

**MECHANICAL DIMENSIONS**

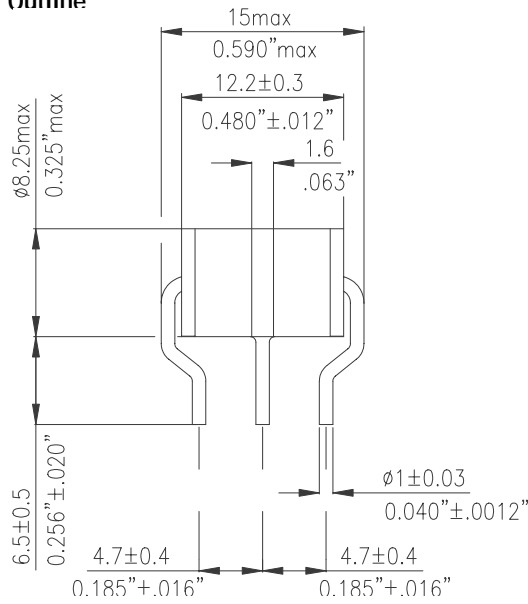
**01 Outline**



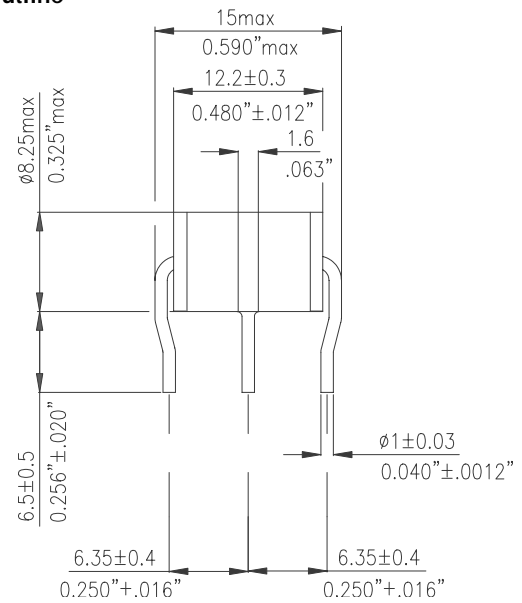
**04 Outline**



**10 Outline**



**06 Outline**



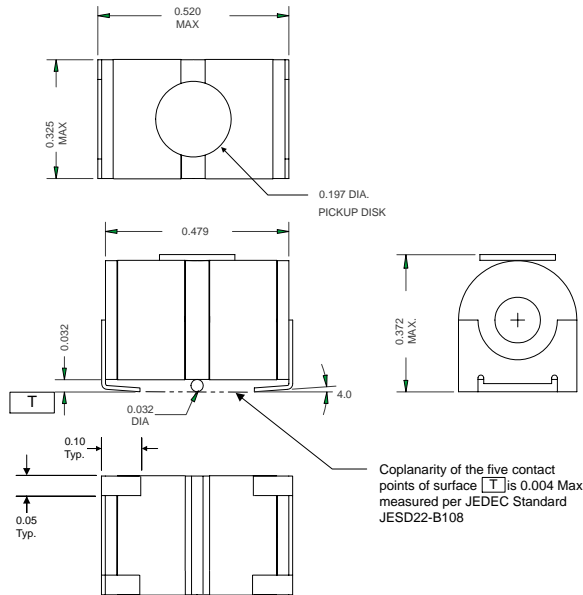
# 3 ELECTRODE NON-RADIOACTIVE SURGE ARRESTERS

## PMT8 Series



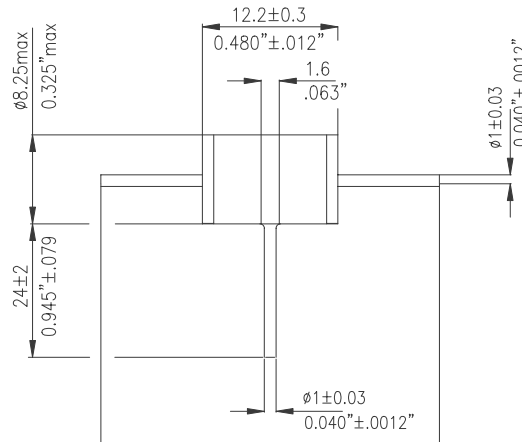
### MECHANICAL DIMENSIONS

S Outline  
See Note 2

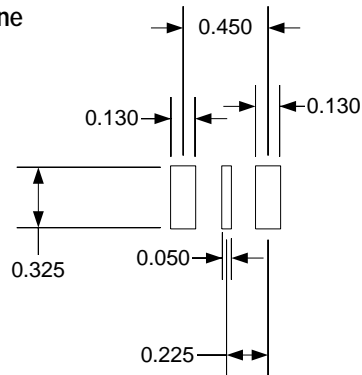


14 Outline

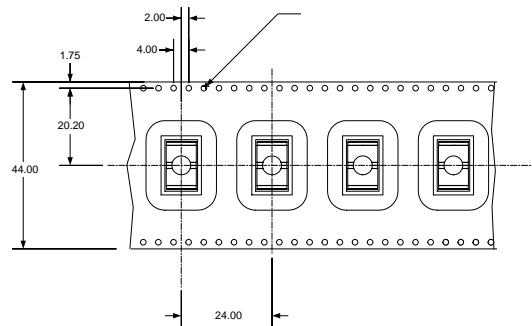
14 Outline



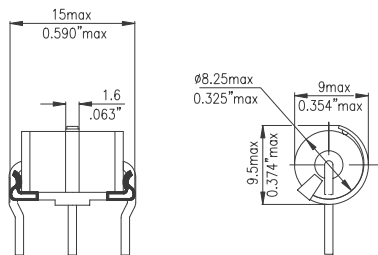
Recommended Land Pattern "S" Outline



Tape & Reel Packaging S Outline



Failsafe Outline



PMT8XXX0S Tape Dimensions  
13" Reel 164 parts  
22" Reel 861 parts

USA 1-866-SRC-8668 Europe 32-89-328850 Far East 886-2-2698-8422