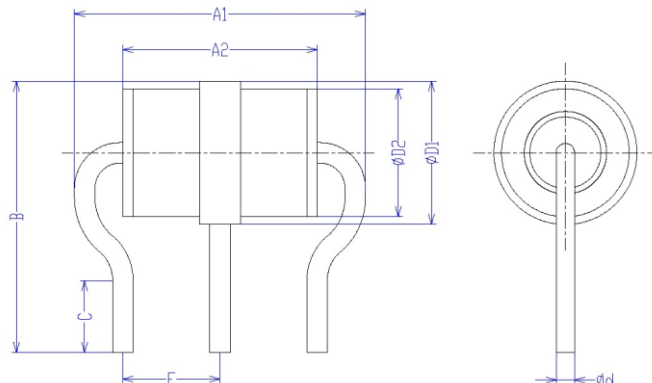
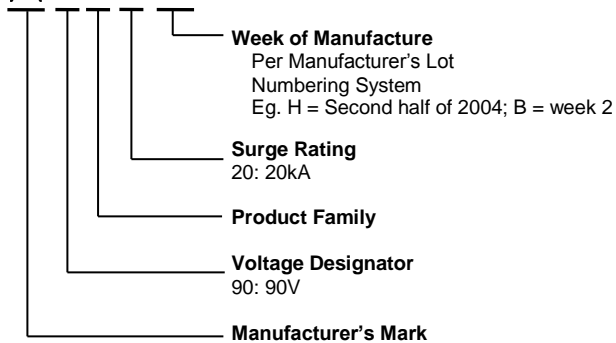


### Specification Status: Released

**Marking:**

XX 90 R 20 HB



**TABLE I. DIMENSIONS:**

	A 1		A2		B	C		ØD1	
	MIN	MAX	MIN	MAX	Norm.	MIN	MAX	MIN	MAX
mm :	11.4	13.4	9.7	10.3	15.0	4.5	6.0	7.8	8.2
in*:	(0.449)	(0.528)	(0.382)	(0.406)	(0.591)	(0.177)	(0.236)	(0.307)	(0.323)

	ØD2		E		Ød
	MIN	MAX	MIN	MAX	Norm
mm:	7.0	7.4	4.1	4.7	1.0
in*:	(0.275)	(0.2891)	(0.161)	(0.185)	(0.039)

\*Rounded off approximation

**TABLE II. ELECTRICAL CHARACTERISTICS (TERMS AND TESTS IN ACCORDANCE WITH ITU-T K.12)**

DC Sparkover Voltage	Impulse Sparkover Voltage		Insulation Resistance	Capacitance	Impulse Discharge Current 8/20µs	AC Discharge Current, 50 Hz	Impulse Life 10/1000µs
(A-E) (B-E)	(A-E)	(B-E)					
@ 100V/s	@100V/µs	@1000V/µs	@50V <sub>DC</sub>	@1MHz	10 hits(5hits for each polarity)	Multiple Hits (1s duration: 10 Hits)	300hits(150 hits for each polarity)
90V ± 20%	≤450	≤550V	≥ 10,000MΩ	<1.0pF	20kA	20Arms	200A



Expertise Applied | Answers Delivered

# Gas Discharge Tube

## Over-Voltage Protection Device

**PRODUCT: GTCA38-900M-R20**

DOCUMENT: SCD28808  
REV LETTER: A  
REV DATE: JULY 26, 2016  
PAGE NO.: 2 OF 2

### General Characteristics:

No Radioactive Materials

Storage temperature: -40°C ... +90°C

Operating temperature: -40°C ... +90°C

Electrode Material: Ni Plating

Lead Material: Tin Plated

Agency Recognitions: UL497B Recognized (File# E179610)

Precedence: This specification takes precedence over documents referenced herein

Effectivity: Reference documents shall be the issue in effect on the date of invitation for bid

CAUTION: Operation beyond the rated voltage or current may result in rupture, electrical arcing or

flame

### Materials Information

ROHS Compliant

Directive 2002/95/EC  
Compliant

ELV Compliant

Directive 2000/53/EC  
Compliant

Pb-Free



Littelfuse products are not designed for, and shall not be used for, any purpose (including, without limitation, automotive, military, aerospace, medical, life-saving, life-sustaining or nuclear facility applications, devices intended for surgical implant into the body, or any other application in which the failure or lack of desired operation of the product may result in personal injury, death, or property damage) other than those expressly set forth in applicable Littelfuse product documentation. Warranties granted by Littelfuse shall be deemed void for products used for any purpose not expressly set forth in applicable Littelfuse documentation. Littelfuse shall not be liable for any claims or damages arising out of products used in applications not expressly intended by Littelfuse as set forth in applicable Littelfuse documentation. The sale and use of Littelfuse products is subject to Littelfuse Terms and Conditions of Sale, unless otherwise agreed by Littelfuse