

**Specification Status: Released**

**Marking:**

XX 90 R 20 HB

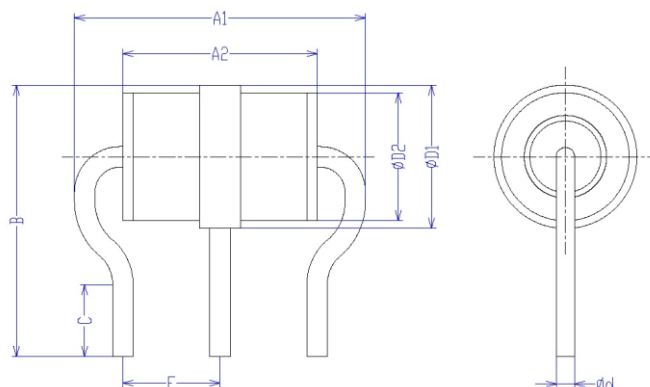
**Week of Manufacture**  
Per Manufacturer's Lot  
Numbering System  
Eg. H = Second half of 2004; B = week 2

**Surge Rating**  
20: 20kA

**Product Family**

**Voltage Designator**  
90: 90V

**Manufacturer's Mark**



**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)				(A+B-E)	(A+B-E)	(A+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



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