

**Specification Status: Released**

Marking:

⌵ 47 R 20 HB

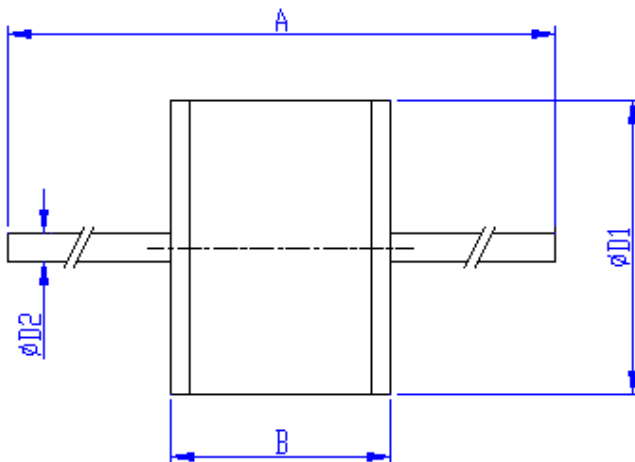
**Week of Manufacture**  
Per Manufacturer's  
Lot numbering system  
Eg. H = Second half of 2004; B = week 2

**Surge Rating**  
20: 20kA

**Product Family**

**Voltage Designator**  
47: 470V

**Manufacturer's Mark**



**TABLE I. DIMENSIONS**

|     | A      |        | B      |        | D1     |        | D2     |
|-----|--------|--------|--------|--------|--------|--------|--------|
|     | MIN    | MAX    | MIN    | MAX    | MIN    | MAX    | NOM    |
| mm  | 58.0   | 66.0   | 5.8    | 6.2    | 7.8    | 8.2    | 1.0    |
| in* | (2.28) | (2.60) | (0.23) | (0.24) | (0.31) | (0.32) | (0.04) |

\*Rounded off approximation

**TABLE II. ELECTRICAL CHARACTERISTICS**

| DC Sparkover Voltage* | Impulse Sparkover Voltage |           | Insulation Resistance | Capacitance | Impulse Discharge Current 8/20µs  | AC Discharge Current, 50 Hz          |
|-----------------------|---------------------------|-----------|-----------------------|-------------|-----------------------------------|--------------------------------------|
| @ 100V/s              | @100V/µs                  | @1000V/µs | @100Vdc               | @ 1MHz      | 10 hits(5 hits for each polarity) | Multiple Hits (1s duration: 10 Hits) |
| 470V ± 20%            | ≤1,050V                   | ≤1,150V   | ≥10,000Mohms          | <1.5pF      | 20kA                              | 20A                                  |

\*In ionized mode

Testing methods and specifications referring to ITU-T K.12

**General Characteristics:**

No Radioactive Materials

Storage temperature: -40°C ... +90°C

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

Electrode : 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

ELV Compliant

Pb-Free

Directive 2002/95/EC  
Compliant

Directive 2000/53/EC  
Compliant





Expertise Applied | Answers Delivered

## Gas Discharge Tube

Over-Voltage Protection Device

**PRODUCT: GTCA28-471M-R20**

DOCUMENT: SCD28641

REV LETTER: A

REV DATE: JULY 26, 2016

PAGE NO.: 2 of 2

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