

#### Gas Discharge Tube Miniature Two Electrode Series Overvoltage Protection Device

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**Raychem Circuit Protection Products** 

PRODUCT: GTCx26

DOCUMENT: SCD 25817 REV LETTER: E1 REV DATE: 15-Apr-11 PAGE NO.: 1 OF 5

# **Specification Status: Released**

## **GENERAL DESCRIPTION**

#### **BENEFITS**

- Helps provide overvoltage fault protection against high energy surges
- Suitable for sensitive equipment due to excellent impulse spark over response
- Suitable for high-frequency applications
- Highly reliable performance

## **FEATURES**

- Crowbar device with low arc-voltage
- Low capacitance and insertion loss
- High accuracy spark-over voltages for high precision designs
- Tested per ITU K.12 recommendations
- Non-radioactive materials

## **APPLICATIONS**

- Telecommunications:
  - MDF modules, xDSL equipment, RF system protection
- Industrial Electronics and Commercial Electronics, such as
  Power Supplies, Surge Protectors, Alarm systems

#### SYMBOL

#### TYPICAL APPLI CATION SCHEMATIC





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#### PART NUMBERING

#### EXAMPLE:



#### **DEVICE MARKING**

#### EXAMPLE : GTCA26-231M-P05





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#### **GENERAL CHARACTERISTICS**

No Radioactive Material

-40°C ... +90°C Storage temperature:

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

Body: Nickel Plated

Leads: Tin Plated

#### **MATERIALS INFORMATION**

**RoHS Compliant** 

**ELV** Compliant





# **DEVICE RATINGS AND CHARACTERISTICS**

	DC Sparkover Voltage	Impulse Sp Volta		Insulation Resistance	Capacitance	DC Holdover Voltage	Impulse Life		Discharge t 8/20 µs		arge Current, ) Hz
Part Number	@ 100V/s	@ 100V / µs	@ 1kV / µs	@ 100V	@ 1MHz	Per ITUK.12	10/1000 μs, 50A	Single Hit	Repeat 10 times (5 times - each polarity)	Single Hit, 9 Cycles	Repeat 10 times (1s interval)
GTCN26-101M-P02 GTCA26-101M-P02		≤ 500V	≤ 700V	≥ 10,000MΩ <sup>1</sup>	≤ 1.0pF	≤ 52V	300 times	3kA	2.5kA		2.5A
GTCN26-231M-P05 GTCA26-231M-P05		≤ 500V	≤ 700V	≥ 10,000MΩ	≤ 1.0pF	≤ 135V	300 times	10kA	5kA	20A	5A
GTCN26-351M-P05 GTCA26-351M-P05	350V ± 20%	≤ 600V	≤ 800V	≥ 10,000MΩ	≤ 1.0pF	≤ 135V	300 times	10kA	5kA	20A	5A

Note 1. Insulation Resistance at 50 V<sub>DC</sub>.





#### **DIMENSIONS**

No Leads (GTCN26):



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**Overvoltage Protection Device** 

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	A		С				
	MIN	MAX	MIN	MAX			
mm:	4.0	4.3	5.8	6.2			
in*:	0.16	0.17	0.23	0.24			
	*Rounded off approximation						

Axial Leads (GTCA26):



	А		С		[	Ød	
	MIN	MAX	MIN	MAX	MIN	MAX	NOM
mm:	4.0	4.3	5.8	6.2	23.0	27.0	0.8
in*:	0.16	0.17	0.23	0.24	0.90	1.06	0.03
	* Rounded off approximation						

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## PACKAGING

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Packaging	Bulk* ( vacuum bags)	Tray**	Standard Box	
GTCN26	200		1,000***	
GTCA26		100	1,000****	

\* Bulk packaging only for GTCN26 \*\*Tray packaging only for GTCA26 \*\*\* 5 bags \*\*\*\* 10 trays

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