

ANTREX Electronics

Electronic Components Sourcing Information

Product Reference Information

Part Number: GTCN28-231L-R05
Manufacturer: Littelfuse Inc.
Package: Tray
Availability: Please confirm with sales

Product Page:

<https://antrexco.com/product/details/littelfuse-inc/gtcn28-231l-r05.html>

Request a Quote:

[Submit RFQ for this part](#)



Scan for product page

Contact Information

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Quality & Trust

New & Original Components

Supplier verification and packaging condition review

CoC / RoHS / REACH documents available on request

Secure sourcing support for OEM / EMS projects

Note:

This PDF includes an ANTREX product reference cover page.

The original manufacturer datasheet follows from the next page.

Gas Discharge Tube Standard Two Electrode Series Overvoltage Protection Device

Raychem Circuit Protection Products

PRODUCT: GTCx28-xxxx-P05

DOCUMENT: SCD 25819
REV LETTER: D
REV DATE: JULY 7, 2008
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 sparkover 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

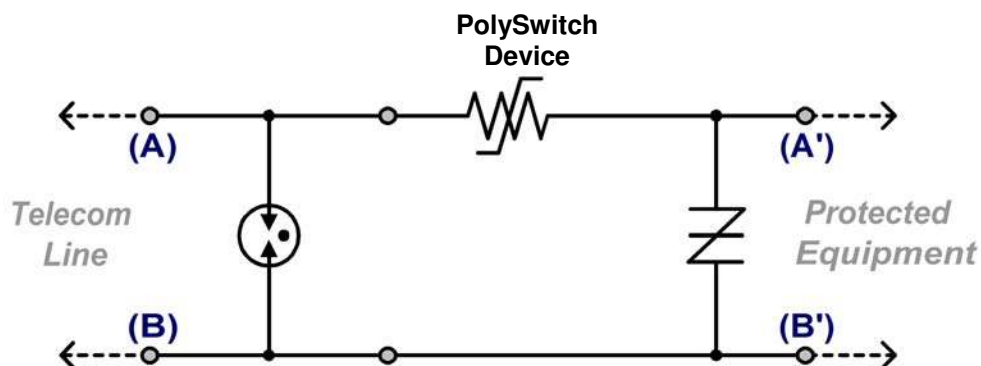
APPLICATIONS

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

SYMBOL

APPLICATION SCHEMATIC

TYPICAL



SiBar
Device

Gas Discharge Tube Standard Two Electrode Series Overvoltage Protection Device

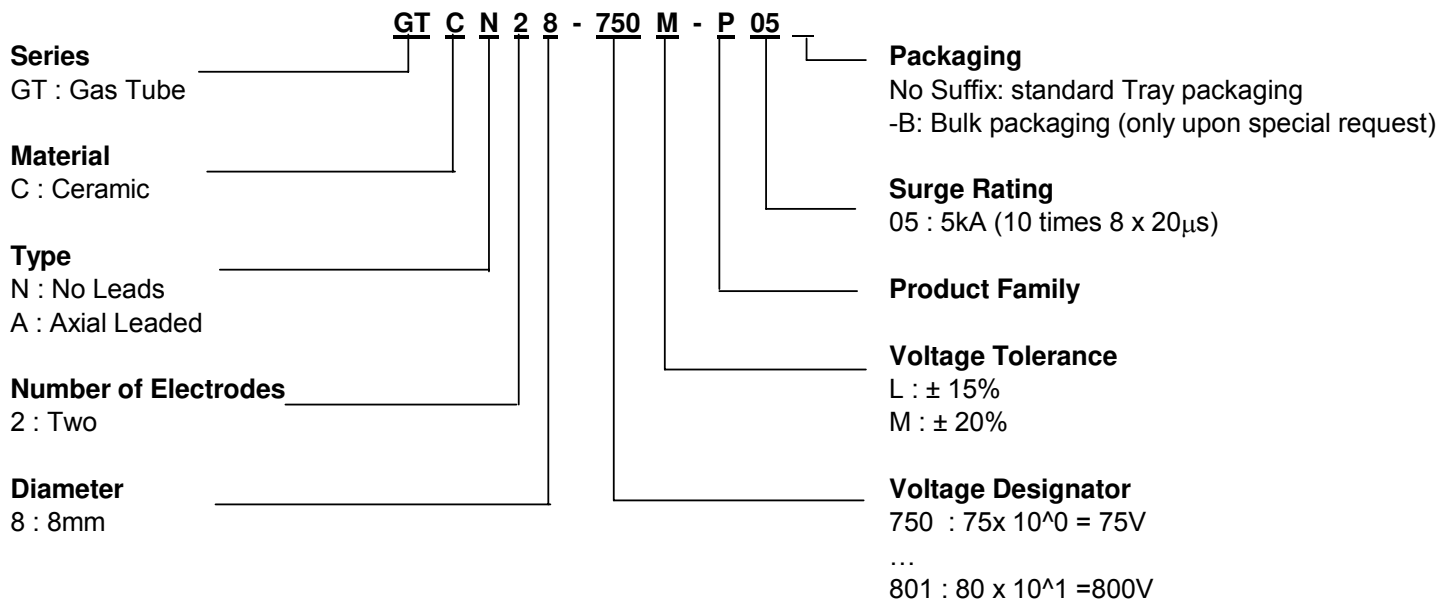
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PAGE NO.: 2 OF 5

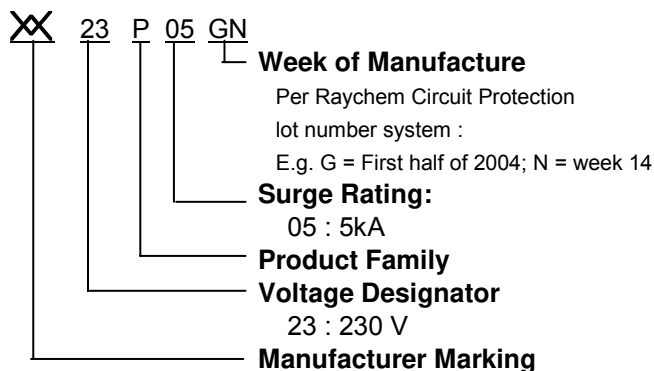
PART NUMBERING

EXAMPLE:



DEVICE MARKING

EXAMPLE : GTCA28-231L-P05:



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PAGE NO.: 3 OF 5

GENERAL CHARACTERISTICS

No Radioactive Material

Storage temperature: -40°C ... +90°C

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

Body: Nickel Plated

Leads: Tin Plated

UL 497B Pending



MATERIALS INFORMATION

RoHS Compliant

ELV Compliant

Directive 2002/95/EC
Compliant

Directive 2000/53/EC
Compliant

DEVICE RATINGS AND CHARACTERISTICS

Part Number	DC Sparkover Voltage	Impulse Sparkover Voltage		Insulation Resistance	Capacitance	DC Holdover Voltage	Impulse Life	Impulse Discharge Current 8/20 μ s		AC Discharge Current, 50 Hz	
	@ 100V/s	@ 100V/ μ s	@ 1kV/ μ s	@ 100V	@ 1MHz	Per ITUK.12	10/1000 μ s, 500A	Single Hit	Repeat 10 times (5 times each polarity)	Single Hit, 9 Cycles	Repeat (1s interval)
GTCN28-750M-P05 GTCA28-750M-P05	75V $\pm$ 20%	$\leq$ 500V	$\leq$ 700V	$\geq$ 10,000M Ω ¹	$\leq$ 1.0pF	$\leq$ 52V	300 times	10kA	5kA	65A	10A, 5 times
GTCN28-900M-P05 GTCA28-900M-P05	90V $\pm$ 20%	$\leq$ 500V	$\leq$ 700V	$\geq$ 10,000M Ω ¹	$\leq$ 1.0pF	$\leq$ 52V	300 times	10kA	5kA	65A	10A, 5 times
GTCN28-151M-P05 GTCA28-151M-P05	150V $\pm$ 20%	$\leq$ 500V	$\leq$ 700V	$\geq$ 10,000M Ω ¹	$\leq$ 1.0pF	$\leq$ 80V	300 times	10kA	5kA	65A	10A, 5 times
GTCN28-231L-P05 GTCA28-231L-P05	230V $\pm$ 15%	$\leq$ 600V	$\leq$ 750V	$\geq$ 10,000M Ω	$\leq$ 1.0pF	$\leq$ 135V	300 times	10kA	5kA	65A	10A, 5 times
GTCN28-251L-P05 GTCA28-251L-P05	250V $\pm$ 15%	$\leq$ 600V	$\leq$ 800V	$\geq$ 10,000M Ω	$\leq$ 1.0pF	$\leq$ 135V	300 times	10kA	5kA	65A	10A, 10times
GTCN28-301L-P05 GTCA28-301L-P05	300V $\pm$ 15%	$\leq$ 700V	$\leq$ 850V	$\geq$ 10,000M Ω	$\leq$ 1.0pF	$\leq$ 150V	300 times	10kA	5kA	65A	10A, 10times
GTCN28-351L-P05 GTCA28-351L-P05	350V $\pm$ 15%	$\leq$ 700V	$\leq$ 850V	$\geq$ 10,000M Ω	$\leq$ 1.0pF	$\leq$ 150V	300 times	10kA	5kA	65A	10A, 10times
GTCN28-401L-P05 GTCA28-401L-P05	400V $\pm$ 15%	$\leq$ 700V	$\leq$ 850V	$\geq$ 10,000M Ω	$\leq$ 1.0pF	$\leq$ 150V	300 times	10kA	5kA	65A	10A, 10times
GTCN28-471L-P05 GTCA28-471L-P05	470V $\pm$ 15%	$\leq$ 700V	$\leq$ 850V	$\geq$ 10,000M Ω ²	$\leq$ 1.0pF	$\leq$ 150V	300 times	10kA	5kA	65A	10A, 10times
GTCN28-601L-P05 GTCA28-601L-P05	600V $\pm$ 15%	$\leq$ 800V	$\leq$ 1,000V	$\geq$ 10,000M Ω ²	$\leq$ 1.0pF	$\leq$ 150V	300 times	10kA	5kA	65A	10A, 10times
GTCN28-801L-P05 GTCA28-801L-P05	800V $\pm$ 15%	$\leq$ 1,000V	$\leq$ 1,200V	$\geq$ 10,000M Ω ²	$\leq$ 1.0pF	$\leq$ 150V	300 times	10kA	5kA	65A	10A, 10times

Note 1. Insulation Resistance at 50 V_{DC}.

Note 2. Insulation Resistance at 250 V_{DC}.

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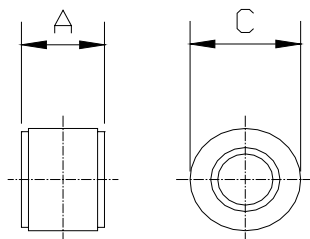
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REV LETTER: D
REV DATE: JULY 7, 2008
PAGE NO.: 4 OF 5

DIMENSIONS

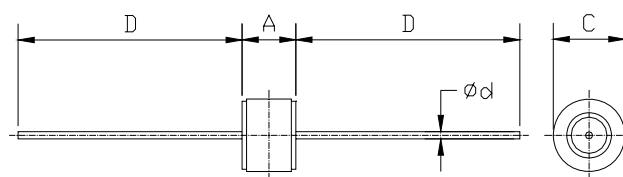
No Leads (GTCN28-xxxx-P05)



	A		C	
	MIN	MAX	MIN	MAX
mm:	5.7	6.3	7.7	8.3
in*:	0.22	0.25	0.30	0.33

*Rounded off approximation

Axial Leads (GTCA28-xxxx-P05)



	A		C		D		Ød
	MIN	MAX	MIN	MAX	MIN	MAX	NOM
mm:	5.7	6.3	7.7	8.3	28.0	32.0	0.8
in*:	0.22	0.25	0.30	0.33	1.10	1.26	0.03

* Rounded off approximation



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www.circuitprotection.com

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PACKAGING

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

* Standard packaging is in trays.

Bulk packaging is only available upon request.

** 5 bags or 10 trays

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