

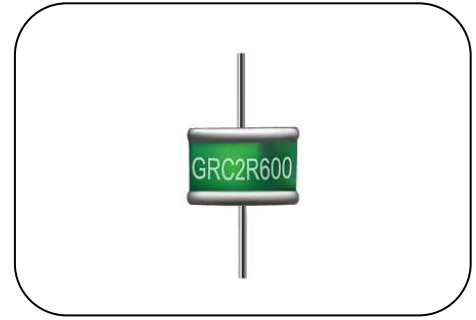
Gas Discharge Tube: GRC2R Series



2-Electrode $\Phi 8 \times T6/7.9$ mm High Voltage and Surge Type

■ Features

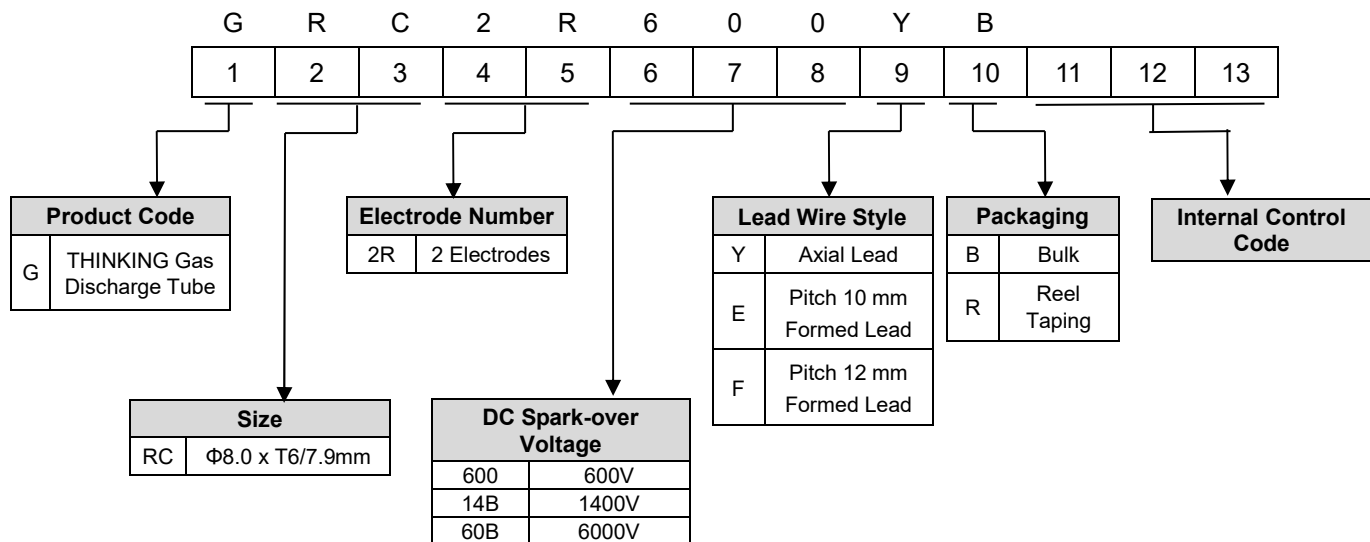
1. RoHS compliant
2. Rugged ceramic-metal construction
3. Available lead wire
4. DC spark-over voltage: 280~6500V
5. Low capacitance
6. Agency recognition: UL / cUL
7. Operating temperature: $-40^{\circ}\text{C} \sim +125^{\circ}\text{C}$
Storage temperature: $-40^{\circ}\text{C} \sim +115^{\circ}\text{C}$



■ Recommended Applications

1. Modem
2. xDSL splitter
3. CATV system
4. Power supply
5. Consumer electronics
6. Communication lines

■ Part Number Code



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■ Characteristics

Part No.	DC Spark-over Voltage	Max. Impulse Breakdown Voltage		Max. Impulse Discharge Current (8/20 μ s)		Arc Voltage	Max. Follow On Current	AC withstand voltage	Minimum Insulation Resistance	Maximum Capacitance (1MHz)	Safety Approvals
	100V/S	100V/ μ s	1KV/ μ s	1time	10time	at 1 Amp Min		ID=10mA, 1min			
	(V)	(V)	(V)	(KA)		TYP	Amps	(V)	(G Ω)	(pF)	UL1449/cUL
GRC2R280□□	230-340	500	550	10	5	~25	200	/	10	1.5	√
GRC2R600□□	600 \pm 20%	1100	1200					/			√
GRC2R800□□	800 \pm 20%	1300	1500					/			√
GRC2R10B□□	1000 \pm 20%	1400	1500					/			√
GRC2R11B□□	1100 \pm 20%	1600	1700					/			√
GRC2R12B□□	1200 \pm 20%	1700	1800					/			√
GRC2R13B□□	1300 \pm 20%	1800	1900					/			√
GRC2R15B□□	1500 \pm 20%	1800	2000					/			√
GRC2R20B□□	2000 \pm 20%	2500	2750					1000			√
GRC2R25B□□	2500 \pm 20%	3200	3500					1250			√
GRC2R27B□□	2700 \pm 20%	3600	4000					1350			√
GRC2R30B□□	3000 \pm 20%	4000	4200					1500			√
GRC2R33B□□	3300 \pm 20%	4600	4700					1650			√
GRC2R40B□□	4000 \pm 20%	5800	6000					2000			√
GRC2R45B□□	4500 \pm 20%	6150	6500					2250			√
GRC2R50B□□	5000 \pm 20%	7500	8000					2500			√
GRC2R62B□□	6200 \pm 20%	8100	9500					3100			√
GRC2R65B□□	6500 \pm 20%	9500	10000	3250	√						

Note 1 : The first □ is style of lead wire, and the second □ is packing.

Note 2 : GRC2R280□□~GRC2R25B□□的T=6 \pm 0.2mm, GRC2R27B□□~GRC2R65B□□的T=7.9 \pm 0.3mm。

Note 3 : UL 1449 4th File No: E314979

Note 4 : Insulation resistance test conditions:

DC Spark-over Voltage	DC Measuring Voltage
151-400V	100V
401-1000V	250V
1001-2000V	500V
2001-6500V	1000V

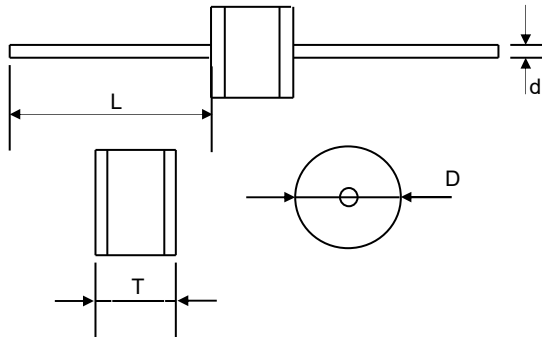
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Dimension

□ = Y (Axial Lead Type)



(Unit: mm)

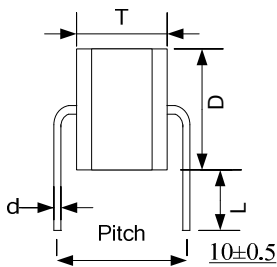
Item	Dimensions	
	Spec.	Tolerance
D	8.0	± 0.2
T	6.0&7.9	± 0.2 & ± 0.3
L	20	Min.
d	0.8	± 0.05

Note: T of GRC2R280□□~ GRC2R25B

□□ parts are 6mm, T of GRC2R27B□

□~GRC2R65B□□ are 7.9mm.

□ = E (Formed Lead)



(Unit: mm)

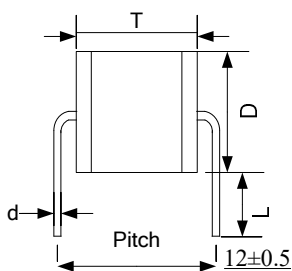
Item	Dimensions	
	Spec	Spec
D	8.0	± 0.2
T	6.0&7.9	± 0.2 & ± 0.3
d	0.8	± 0.05
L	4.0	± 0.5
P	10.0	± 0.5

Note: T of GRC2R280□□~ GRC2R25B

□□ parts are 6mm, T of GRC2R27B□□

~GRC2R65B□□ are 7.9mm.

□ = F (Formed Lead)



Item	Dimensions	
	Spec	Spec
D	8.0	± 0.2
T	6.0&7.9	± 0.2 & ± 0.3
d	0.8	± 0.05
L	4.0	± 0.5
P	12.0	± 0.5

Note: T of GRC2R280□□~ GRC2R25B

□□ parts are 6mm, T of GRC2R27B□□

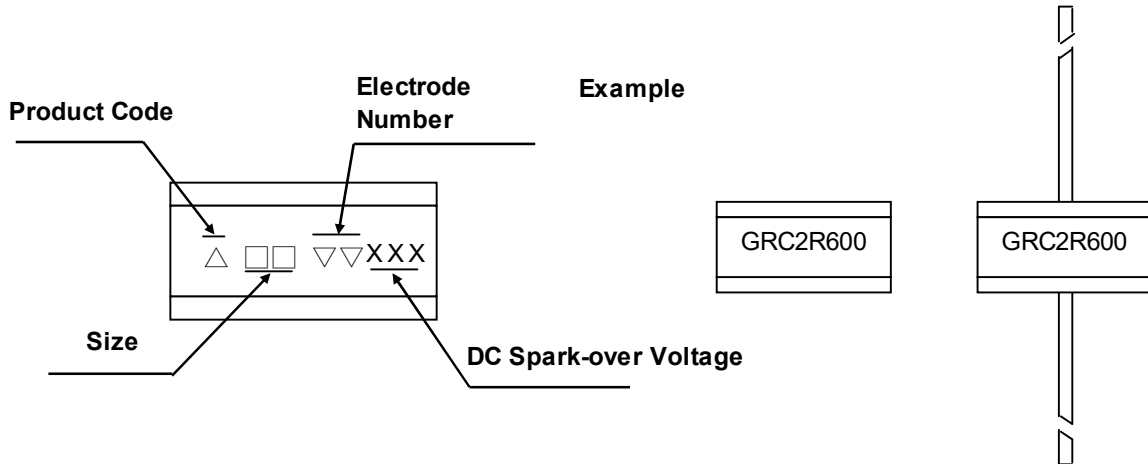
~GRC2R65B□□ are 7.9mm.

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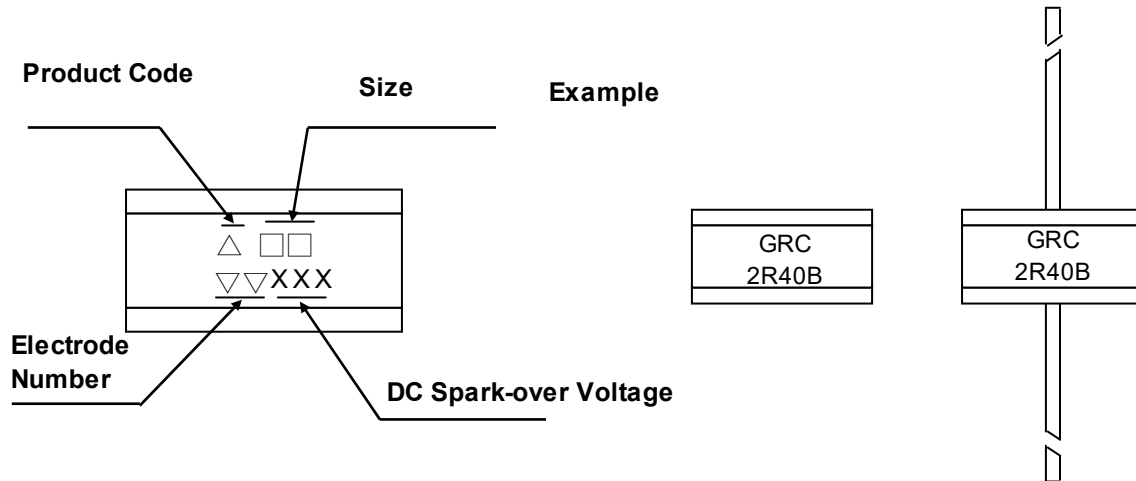


2-Electrode $\Phi 8 \times T6/7.9$ mm High Voltage and Surge Type

■ Marking

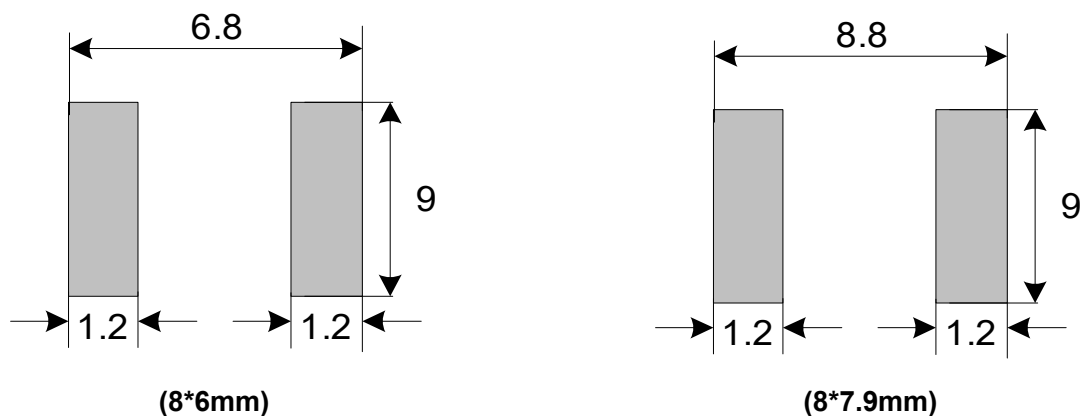


Note: T of GRC2R280□□~ GRC2R25B□□ parts are 6mm.



Note: T of GRC2R27B□□~GRC2R65B□□ are 7.9mm.

■ Recommended Pad Size(for 8×8 mm)



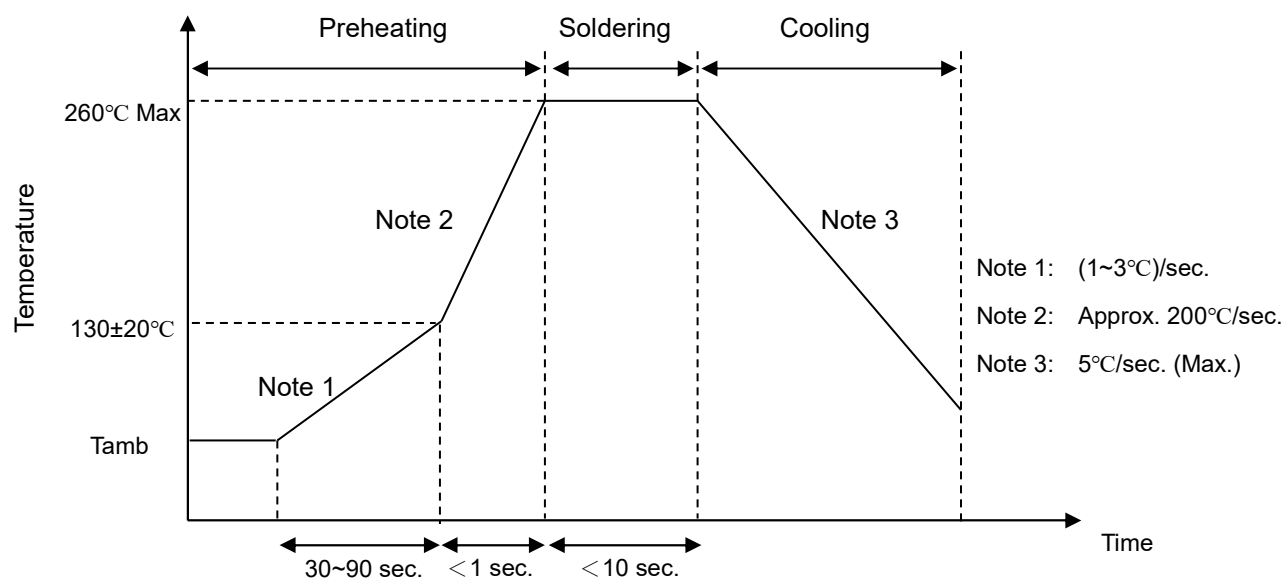
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■ Soldering Recommendation

● Wave Soldering Profile



● Recommended Reworking Conditions with Soldering Iron

Item	Condition
Temperature of Soldering Iron-tip	360°C (max.)
Soldering Time	3 sec. (max.)
Distance from Tube	2 mm (min.)

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■ Packaging

● Bulk

- ◆ 8x6mm For Axial Lead (Y/E Type):
Quantity: 100pcs per PVC Box, and 500 pcs per Inner Box
Quantity (MPQ): 500pcs

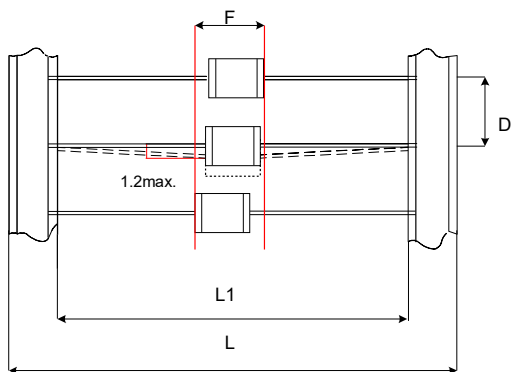
- ◆ 8x7.9mm For Axial Lead (Y/F Type):
Quantity: 100pcs per PVC Box, and 500 pcs per Inner Box
Quantity (MPQ): 500pcs

● Taping

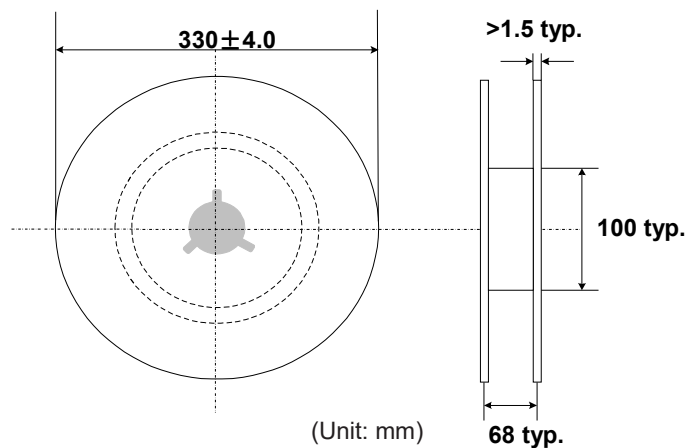
For 2-electrode Axial Lead GDT: 500 PCS/Reel

Quantity (MPQ): 500pcs

(Unit: mm)



Item	Dimensions	
	Spec.	Tolerance
L1	52	± 2
L	64	± 3
D	10	± 0.5
F	T + 1.4	Max.



■ Warehouse Storage Conditions of Products

- Storage Conditions:
 1. Storage Temperature: $-10^{\circ}\text{C} \sim +40^{\circ}\text{C}$
 2. Relative Humidity: $\leq 75\% \text{RH}$
 3. Keep away from corrosive atmosphere and sunlight.
- Period of Storage: 1 year