

Gas Discharge Tube: GF4 Series

SMD 2-Electrode $\Phi 4.2/3.5 \times T4$ mm Type



■ Features

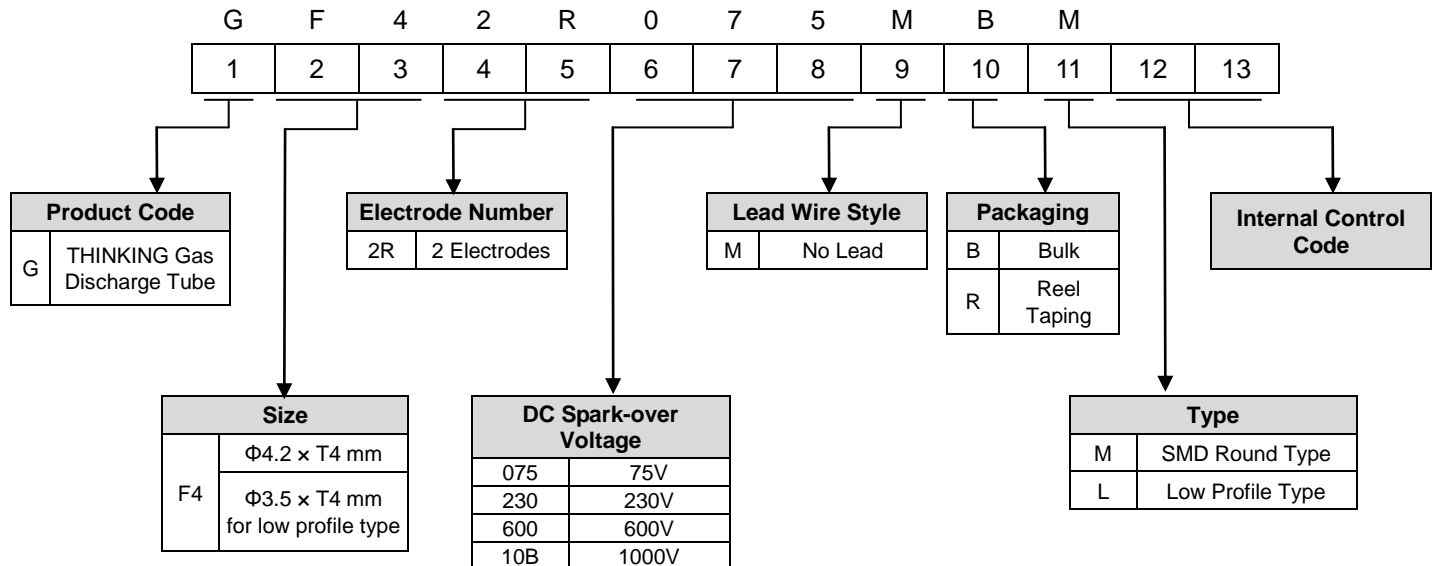
1. RoHS & HF compliant
2. SMD type series
3. DC spark-over voltage: 75~1000V
4. Low capacitance
5. Agency recognition: UL
6. Operating temperature: $-40^{\circ}\text{C} \sim +105^{\circ}\text{C}$
Storage temperature: $-40^{\circ}\text{C} \sim +115^{\circ}\text{C}$



■ Recommended Applications

1. Cable modem
2. xDSL
3. Set-top box
4. TV sets
5. Power supply
6. Consumer electronics

■ Part Number Code



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■ Characteristics

Part No.	DC Spark-over Voltage	Maximum Impulse Breakdown Voltage		Max. Impulse Discharge Current (8/20 μ s)		Impulse Life (10/1000 μ s)	Normal Alternating Discharge Current	DC Holdover Voltage	Minimum Insulation Resistance	Maximum Capacitance (1MHz)	Safety Approvals	
	100V/S	100V/ μ s	1KV/ μ s	1 time	10 times	100A	50Hz 1Sec	<150ms			UL 1449	UL 497B
	(V)	(V)	(V)	(KA)		(Times)	(A)	(V)				
GF42R075MRM	75 \pm 20%	700	800	5	3	300	3	52	1	0.5		√
GF42R090MRM/L	90 \pm 20%	700	800					52			√	
GF42R145MRM/L	145 \pm 20%	700	800					52			√	
GF42R230MRM/L	230 \pm 20%	600	700					80			√	
GF42R250MRM/L	250 \pm 20%	600	700					80			√	
GF42R300MRM/L	300 \pm 20%	600	700					150			√	
GF42R350MRM/L	350 \pm 20%	650	800					150			√	
GF42R400MRM/L	400 \pm 20%	700	800					150			√	
GF42R470MRM/L	470 \pm 20%	800	900					150			√	
GF42R600MRM/L	600 \pm 20%	900	1000					150			√	
GF42R800MRM	800 \pm 20%	1300	1400	3	2	100	2	150		√		
GF42R10BMRM	1000 \pm 20%	1500	1600			100*		150		√		

Note1: M is for SMD round type; L is for low profile type

Note2: UL 497B File No: E245070; UL 1449 4th File No: E314979

Note3:* means products measured with an 8/20 μ s waveform, 100A

Note4: Insulation resistance test condition:

DC Spark-over Voltage	DC Measuring Voltage
70-150V	50V
151-400V	100V
401-1000V	250V
1001-2000V	500V
>2001V	1000V

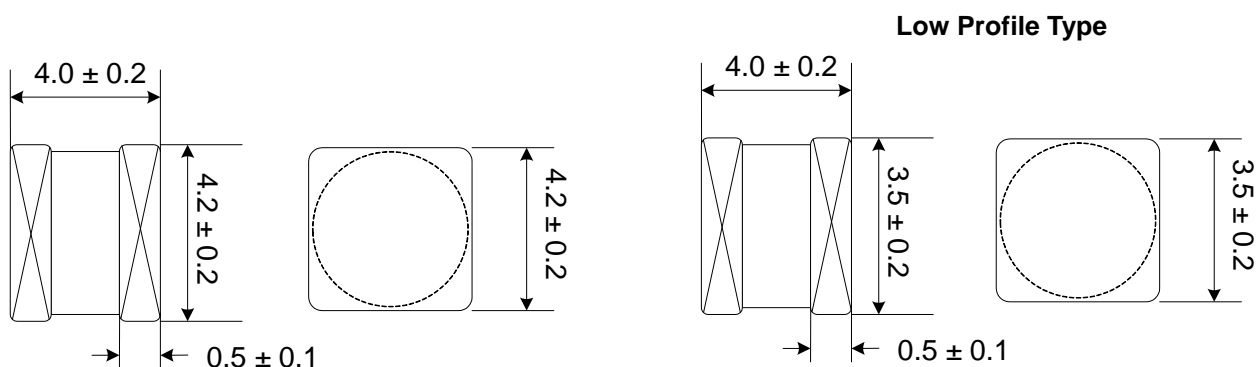
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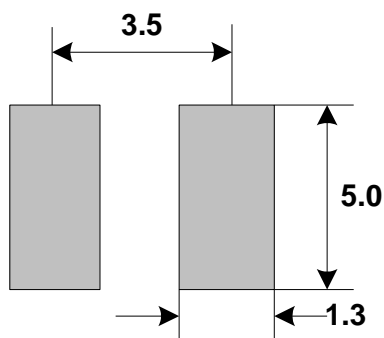
Dimension

(Unit: mm)



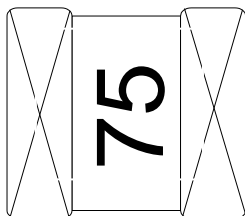
Recommended Pad Size

(Unit: mm)



Marking

Example: GF42R075MRM



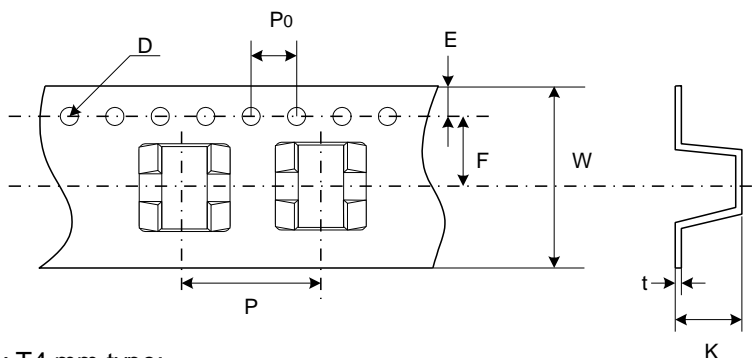
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■ Packaging

● Taping



◆ For $\Phi 4.2$ x T4 mm type:

Quantity (MPQ): 900pcs

(Unit: mm)

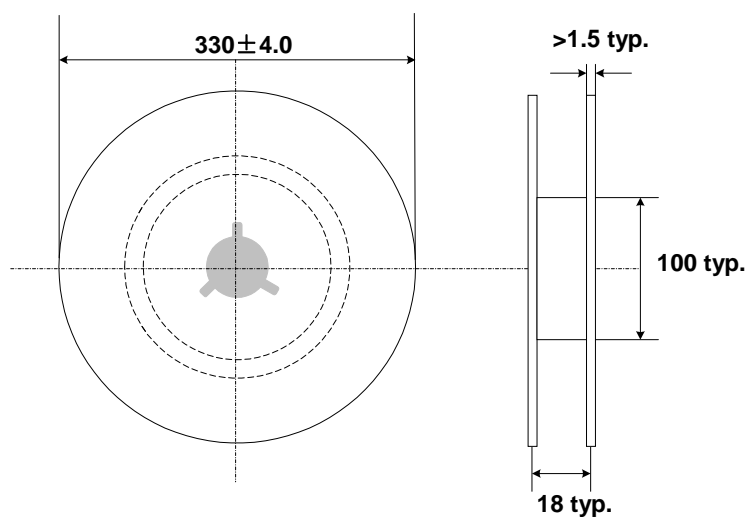
Item	P	P0	W	F	E	D	K	t
Spec.	12.0	4.0	16.0	7.5	1.75	$\Phi 1.55$	4.6	0.5
Tolerance	± 0.1	± 0.1	± 0.3	± 0.1	± 0.1	± 0.05	+0.2,-0.1	± 0.05

◆ For $\Phi 3.5$ x T4 mm low profile type:

Quantity (MPQ): 2,000pcs

(Unit: mm)

Item	P	P0	W	F	E	D	K	t
Spec.	8.0	4.0	16.0	7.5	1.75	$\Phi 1.55$	3.9	0.4
Tolerance	± 0.1	± 0.1	± 0.3	± 0.1	± 0.1	± 0.05	± 0.1	± 0.05



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- **Bulk**

- ◆ For GF4 Series:

Quantity: 200pcs per PVC Box, 1200pcs per Inner Box

Quantity (MPQ): 1200pcs

- **Warehouse Storage Conditions of Product**

- 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