

Gas Discharge Tube: GF62R Series



SMD 2-Electrode $\Phi 6.2 \times T4.2$ mm Type

■ Features

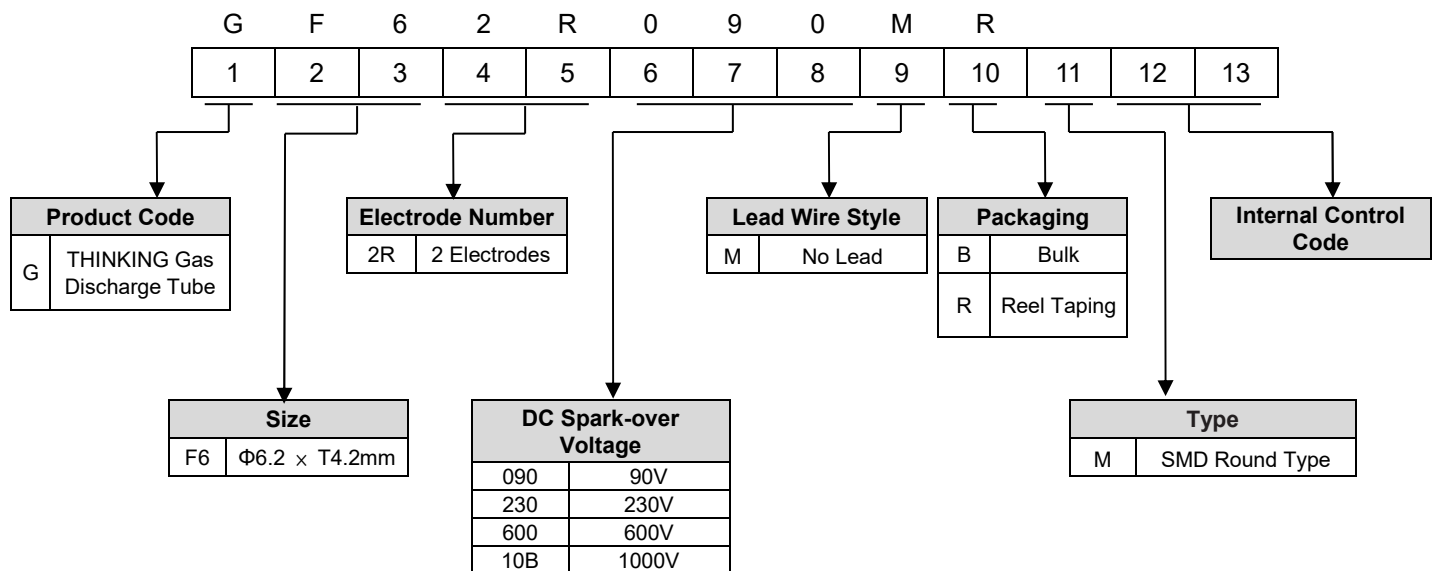
1. RoHS & HF compliant
2. SMD type series
3. DC spark-over voltage: 90~1200V
4. Low capacitance
5. Agency recognition: UL
6. Operating temperature: $-40^{\circ}\text{C} \sim +105^{\circ}\text{C}$
Storage temperature: $-40^{\circ}\text{C} \sim +115^{\circ}\text{C}$



■ 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	Max. 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			(G Ω)	(pF)	UL 1449	UL 497B
	(V)	(V)	(V)	(KA)		(Times)	(A)	(V)					(V)	(V)
GF62R090M□□	90 \pm 20%	600	700	8	5	500	5	52	1	0.8		√		
GF62R145M□□	145 \pm 20%	500	700					52			√			
GF62R230M□□	230 \pm 20%	500	600					80			√			
GF62R250M□□	250 \pm 20%	500	600					135			√			
GF62R300M□□	300 \pm 20%	550	650					150			√			
GF62R350M□□	350 \pm 20%	600	700					150			√			
GF62R400M□□	400 \pm 20%	650	750					150			√			
GF62R470M□□	470 \pm 20%	750	850					150			√			
GF62R600M□□	600 \pm 20%	900	1000					150			√			
GF62R800M□□	800 \pm 20%	1000	1100					150			√			
GF62R10BM□□	1000 \pm 20%	1500	1600	5	3	300*	3	150		√				
GF62R12BM□□	1200 \pm 20%	1700	1800					150	√					

Note 1: The first □ is packaging, B=Bulk, R=Reel Taping; the second □ is style of SMD Type, M= Round.

Note 2: M Type 90-470V: UL 497B File No: E245070; M Type 600V: UL Pending; M Type 800-1200V: UL 1449 4th File No: E314979.

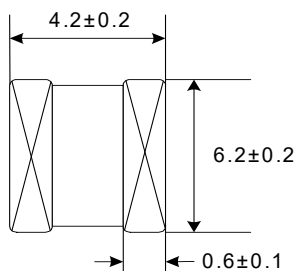
Note 3: :* means products measured with an 8/20us waveform, 100A

Note 4: Insulation resistance test conditions:

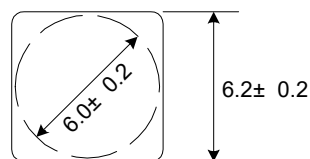
DC Spark-over Voltage	DC Measuring Voltage
90-150V	50V
151-400V	100V
401-1000V	250V
1001-2000V	500V
>2001V	1000V

Dimension

(Unit: mm)



Round Type



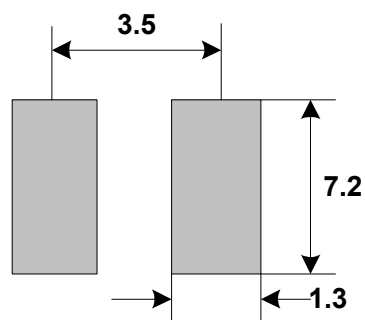
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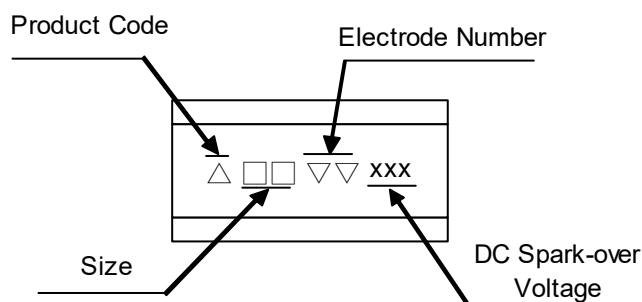


■ Recommended Pad Size

(Unit: mm)



■ Marking



Example



Note: C (Square Type) without Marking

■ Soldering Recommendation

● Recommended Reworking Conditions with Soldering Iron

Item	Conditions
Temperature of Soldering Iron-tip	360°C (max.)
Soldering Time	3 sec. (max.)
Diameter of Soldering Iron-tip	$\Phi 3$ mm (max.)

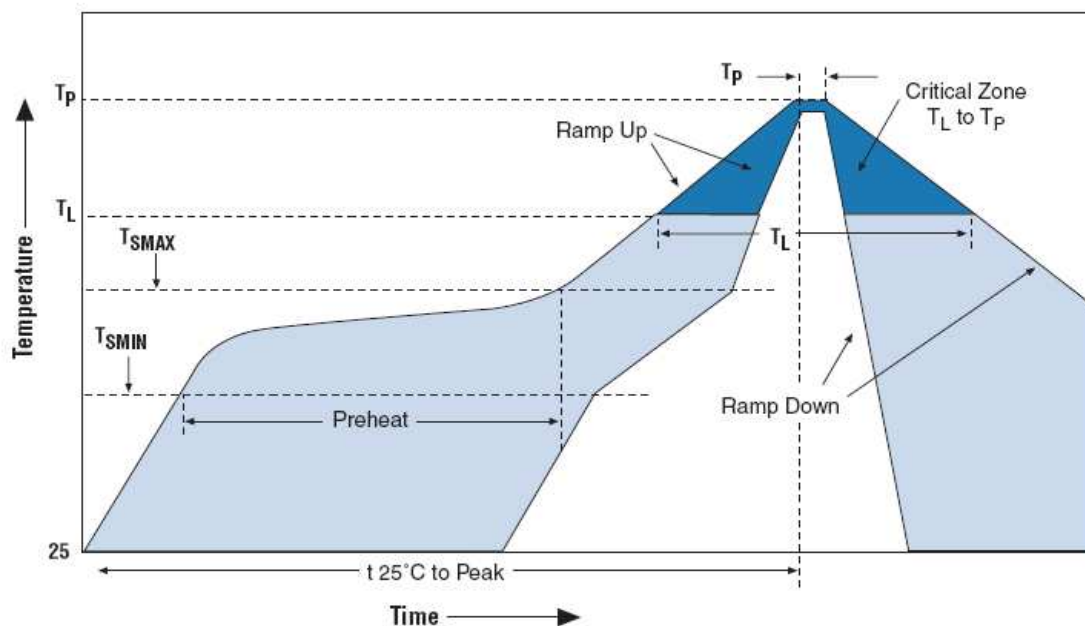
Caution: Please do not touch the component surface with soldering iron directly to avoid its damage.

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- IR-Reflow Soldering Profile



Lead-Free Reflow Profile Recommendation (IPC/JEDEC J-STD-020C)

Reflow Parameter	Lead-Free Assembly
Minimum preheat temperature (TsMIN)	150°C
Maximum preheat temperature (TsMAX)	200°C
Preheat Time	60-180 seconds
TsMAX to TL ramp-up rate	3°C/second maximum
Time above temperature TL(tL)	217°C 60-120 seconds
Peak Temperature (TP)	245°C ~260°C(recommended 250°C)
Time 25°C to TP	6 minute maximum
Time within 5° of Peak TP	10-20 seconds
Ramp-down rate	4°C/second maximum

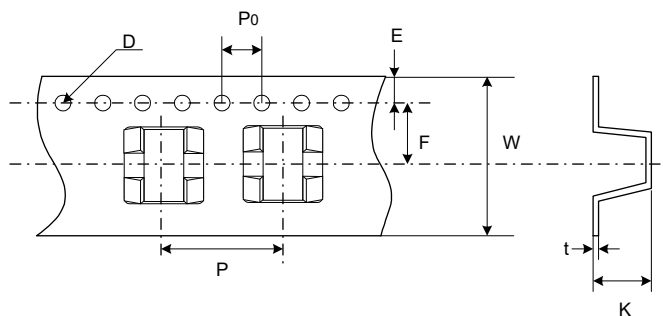
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■ Packaging

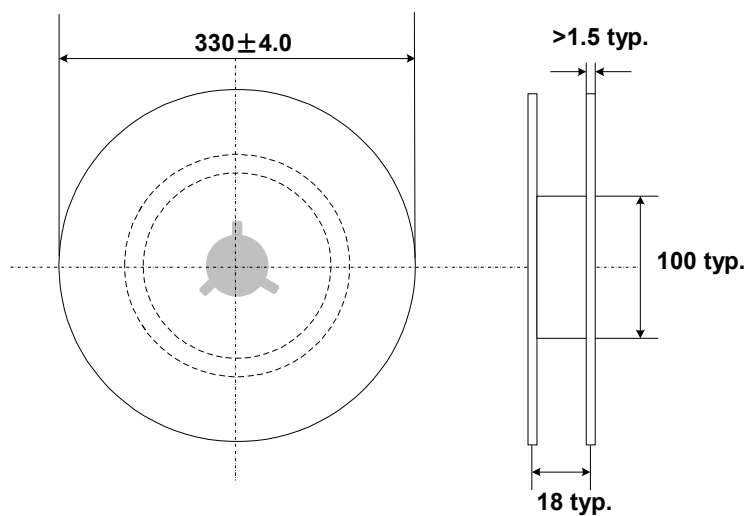
● Taping



Quantity (MPQ): 800pcs

(Unit: mm)

ITEM	P	P0	W	F	E	D	K	t
Spec.	12.0	4.0	16.0	7.5	1.75	$\Phi 1.55$	6.7	0.5
Tolerance	± 0.1	± 0.1	± 0.3	± 0.1	± 0.1	± 0.05	± 0.1	± 0.05



● Bulk

◆ For GF6 Series :

Quantity: 100pcs per PVC Box, 500pcs per Inner Box

Quantity (MPQ): 800pcs

■ 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