

# Gas Discharge Tube: GF32Y Series



## SMD L4.5 x W3.2 x H2.7 mm Type

### ■ Features

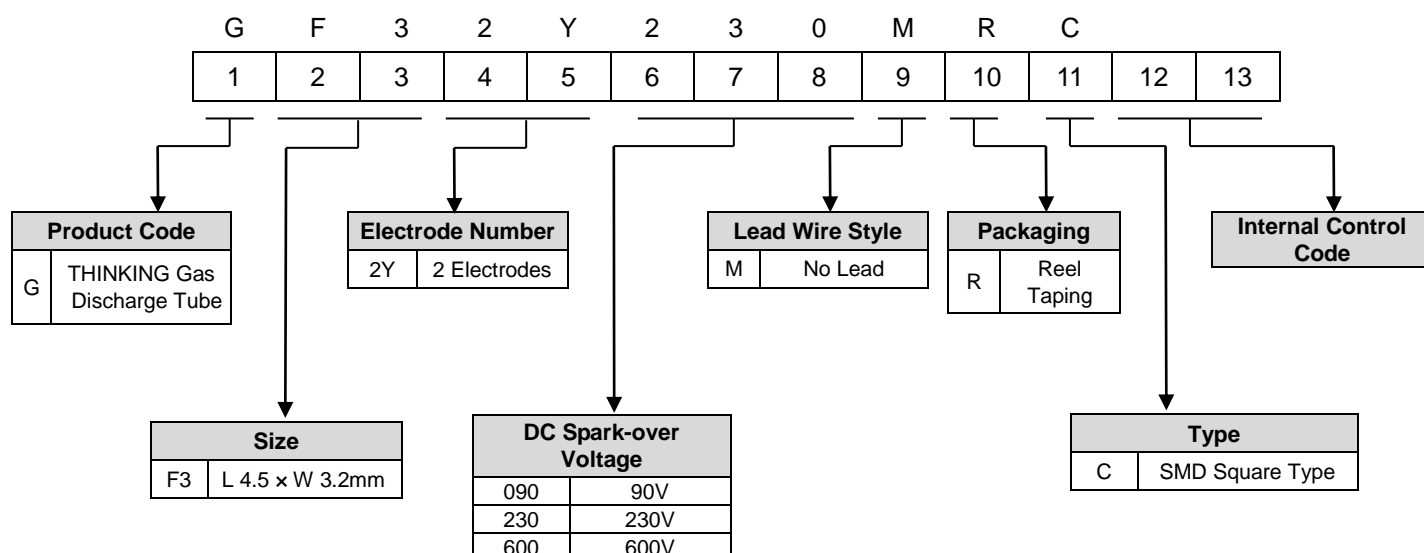
1. RoHS & HF compliant
2. SMD structure
3. DC spark-over voltage: 90~600V
4. Low capacitance
5. Agency recognition: UL
6. Operating temperature: -40°C ~ +125°C  
Storage temperature: -40°C ~ +125°C



### ■ Recommended Applications

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

### ■ Part Number Code



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### Characteristics

Part No.	DC Spark-over Voltage	Max. Impulse Discharge Current	Impulse Withstanding Voltage Capacity	Impulse Life	Minimum Insulation Resistance	Maximum Capacitance	Safety Approvals
	100V/S (V)		10/700μs (KV)	8/20 μs, 100A (Times)		1MHz (pF)	
GF32Y090MRC	90 ± 30%	2KA (Positive/ Negative 5 Times)	6KV R = 40Ω (Positive/ Negative 5 Times)	300	1	0.5	√
GF32Y150MRC	150 ± 20%						√
GF32Y230MRC	230 ± 20%						√
GF32Y300MRC01	300 ± 20%						√
GF32Y350MRC	350 ± 20%						√
GF32Y400MRC	400 ± 20%						√
GF32Y470MRC	470 ± 20%						√
GF32Y600MRC	600 ± 20%						√

Note1: C is for SMD square type

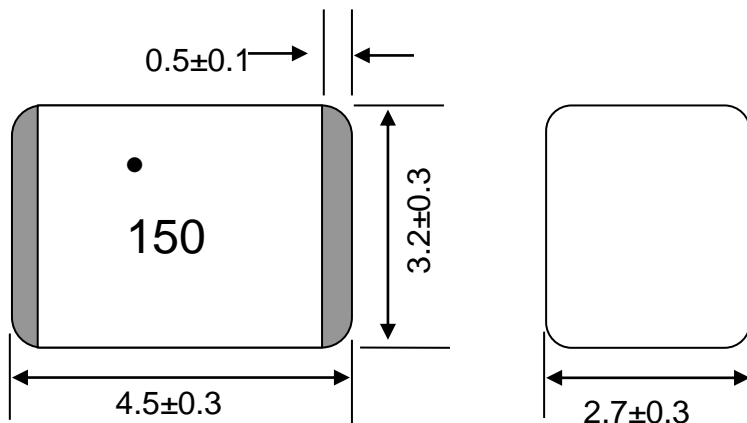
Note2: UL 497B File No : E245070

Note3: Insulation resistance test condition:

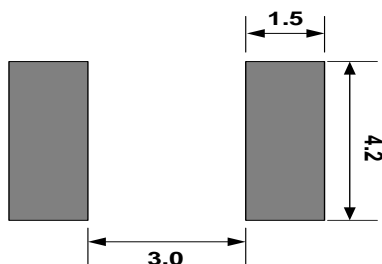
DC Spark-over Voltage	DC Measuring Voltage
90V	50V
150-600V	100V

### Dimension

(Unit: mm)



### Recommended Pad Size



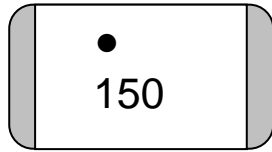
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### ■ Marking

Example: GF32Y150MRC



### ■ 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	Φ3mm (max.)

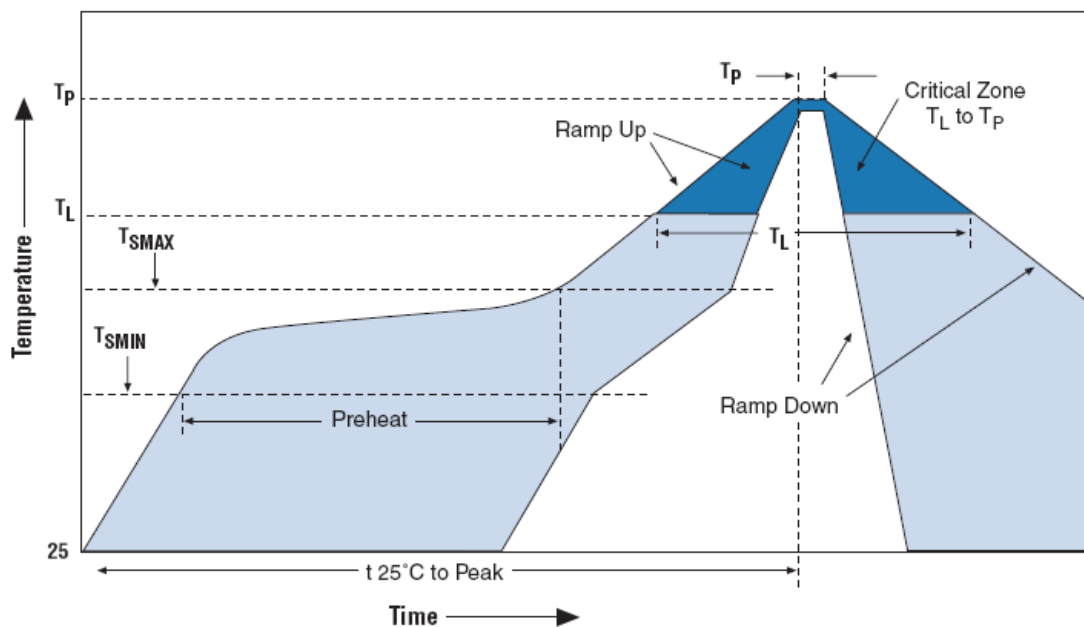
Caution: Please do not touch the component surface with soldering iron directly to avoid its damage.

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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

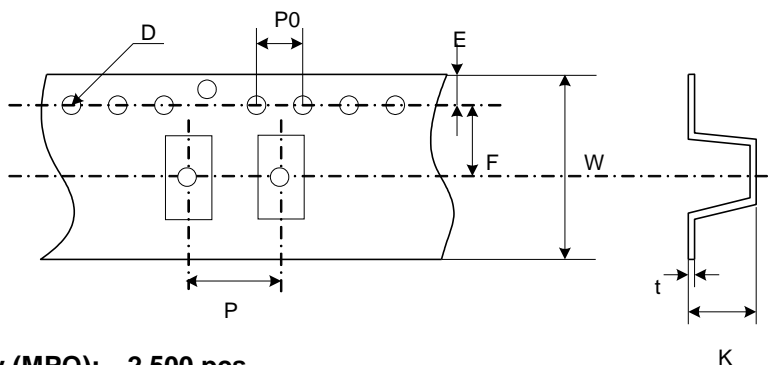
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### ■ Packaging

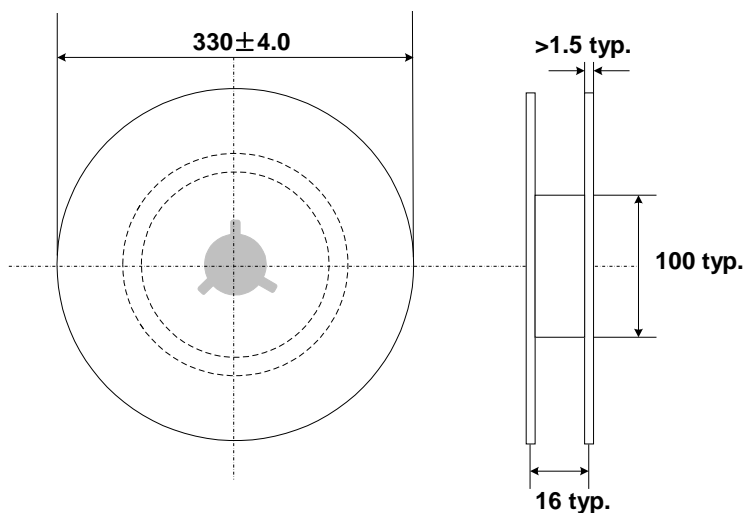
#### ● Taping



Quantity (MPQ): 2,500 pcs

Unit: mm

ITEM	P	P0	W	F	E	D	K	t
Spec.	8.0	4.0	12.0	5.5	1.75	Φ1.55	3.1	0.4
Tolerance	±0.1	±0.1	±0.3	±0.1	±0.1	±0.05	±0.1	±0.05



### ■ 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