

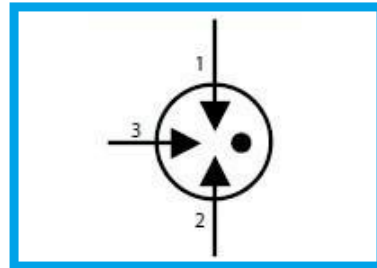
## Gas Discharge Tube – PG35E-M Series

### Features

- DC Spark-over voltage: 75~1100V
- Low Capacitance
- Micro-Gap Design
- Stable breakdown voltage
- RoHS & HF compliant
- High holdover voltage
- High insulation resistance
- Large absorbing transient current capability.

### Applications

- Communication equipment
- Test equipment
- Data lines
- CATV equipment
- Power Supplies
- Telecom SLIC protection
- Telecommunications

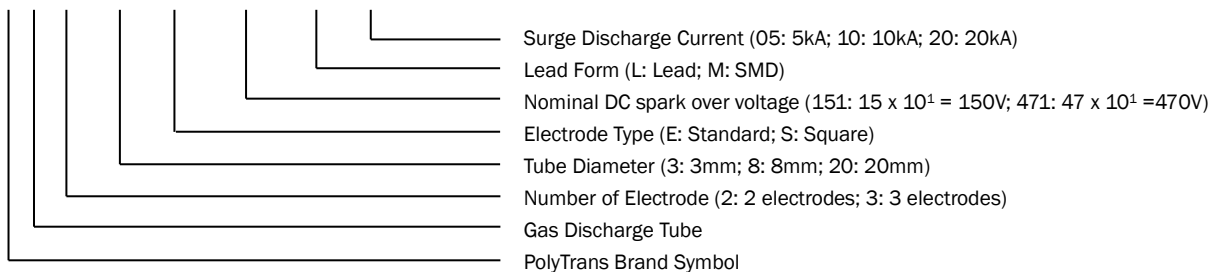


### General Characteristics Definition

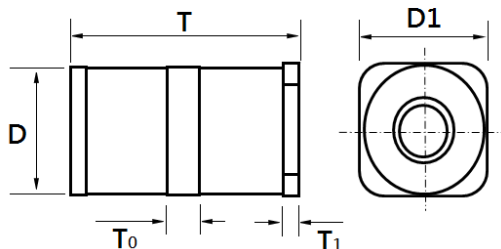
- Operating temperature: -40 ~ 85°C
- Storage temperature: -40 ~ 85°C

### Part Number Code

P G □ □ □ □ □ □ □ □

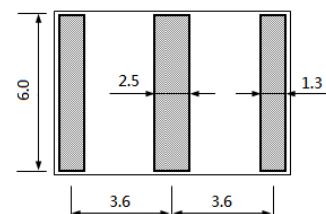


### Physical Dimensions



Symbol	Dimension (mm)
D	5.0±0.2
D <sub>1</sub>	5.0±0.2
T	7.6±0.2
T <sub>0</sub>	1.60±0.05
T <sub>1</sub>	0.40±0.05

### Solder pad layout

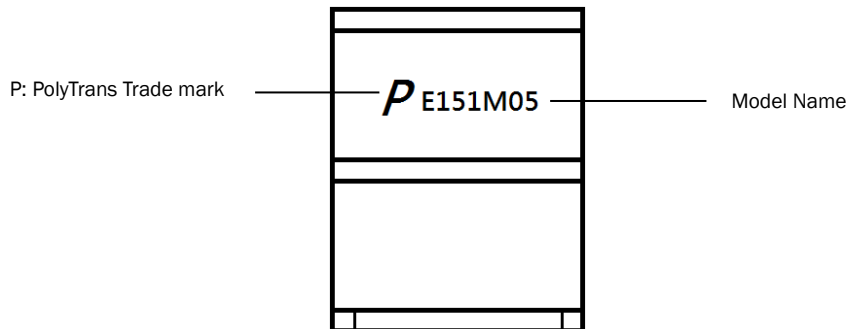


## Gas Discharge Tube – PG35E-M Series

### Electrical Characteristics

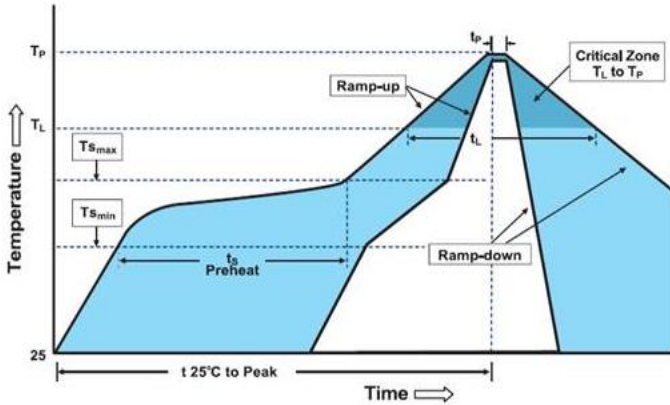
Part Number	DC Spark-over Voltage @ 100V/S	Impulse Spark-over Voltage @ 1kV/μS	Impulse Discharge Current (8/20 μs)		AC Discharge Current	Minimum Insulation Resistance	Maximum Capacitance @ 1.0 MHz	UL Certificate (E474915)
			1 Hits	10 Hits	1 sec/50 Hz			
	(V)	(V)	(kA)	(kA)	(A)	(GΩ)	(pF)	
PG35E075M05	75±20%	≤ 700	10	5	5	10	2.0	✓
PG35E091M05	90±20%	≤ 600	10	5	5	10	2.0	✓
PG35E121M05	120±20%	≤ 600	10	5	5	10	2.0	-
PG35E151M05	150±20%	≤ 600	10	5	5	10	2.0	✓
PG35E201M05	200±20%	≤ 700	10	5	5	10	2.0	✓
PG35E231M05	230±20%	≤ 700	10	5	5	10	2.0	✓
PG35E251M05	250±20%	≤ 700	10	5	5	10	2.0	✓
PG35E351M05	350±20%	≤ 750	10	5	5	10	2.0	✓
PG35E401M05	400±20%	≤ 800	10	5	5	10	2.0	✓
PG35E421M05	420±20%	≤ 800	10	5	5	10	2.0	✓
PG35E471M05	470±20%	≤ 900	10	5	5	10	2.0	✓
PG35E601M05	600±20%	≤ 1000	10	5	5	10	2.0	✓
PG35E801M05	800±20%	≤ 1400	10	5	5	10	2.0	-
PG35E112M05	1100±20%	≤ 1750	10	5	5	10	2.0	-

### Marking Definitions



## Gas Discharge Tube – PG35E-M Series

### Lead Free Reflow Soldering Recommendations

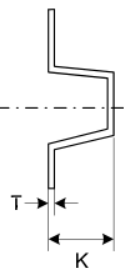
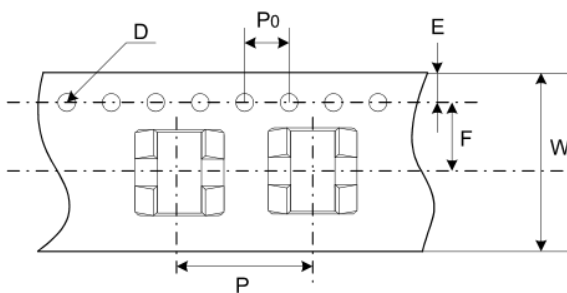


Profile Feature	Pb-Free Assembly
Average Ramp-Up Rate ( $T_{S_{max}}$ to $T_P$ )	3°C/second max.
Preheat	
-Temperature Min ( $T_{S_{min}}$ )	150°C
-Temperature Max ( $T_{S_{max}}$ )	200°C
-Time ( $T_{S_{min}}$ to $T_{S_{max}}$ )	60-180 seconds
Time maintained above:	
-Temperature ( $T_L$ )	217°C
-Time ( $t_L$ )	60-150 seconds
Peak Temperature ( $T_P$ )	260°C
Time within 5°C of actual Peak Temperature ( $t_P$ )	20-40 seconds
Ramp-Down Rate	6 °C /second max.
Time 25°C to Peak Temperature	8 minutes max.
Storage Condition	0°C ~35°C, ≤ 70%RH

**Note:** If the reflow soldering temperatures exceed the recommended profile, devices may not meet the performance requirements.

### Packaging Information

Part Number	Quantity (EA/Roll)
PG35E-M Series	1000



Dimension	Millimeters
P	8.0±0.1
P0	4.0±0.1
D	1.55±0.05
E	1.75±0.1
F	7.5±0.1
W	16.0±0.3
T	0.50±0.05
K	5.5±0.1