

Gas Discharge Tube - PG25E-M05 Series

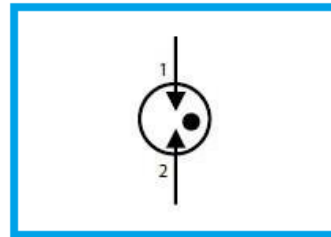
Features

- DC Spark-over voltage: 75~600V
- 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

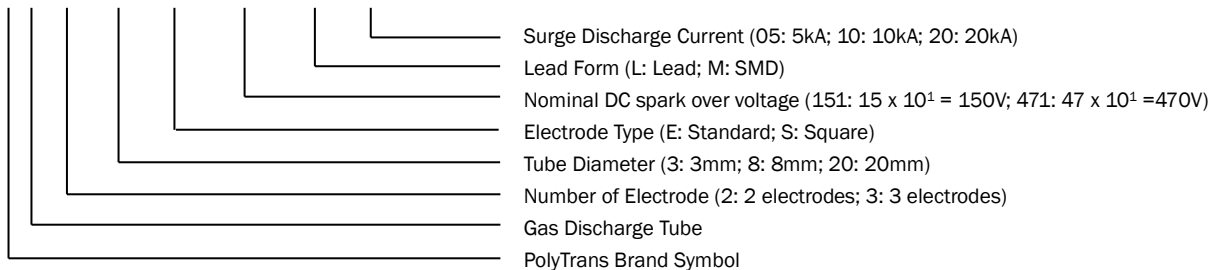


General Characteristics Definition

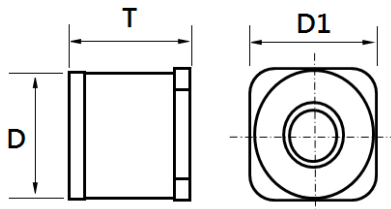
- Operating temperature: -50 ~ 125°C
- Storage temperature: -50 ~ 125°C

Part Number Code

P G □ □ □ □ □ □ □ □

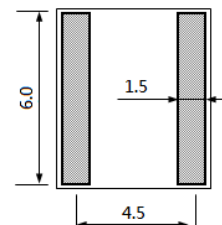


Physical Dimensions



| Symbol | Dimension (mm) |
|--------|----------------|
| D | 5.0±0.6 |
| T | 5.0±0.2 |
| D1 | 5.3±0.5 |

Solder pad layout

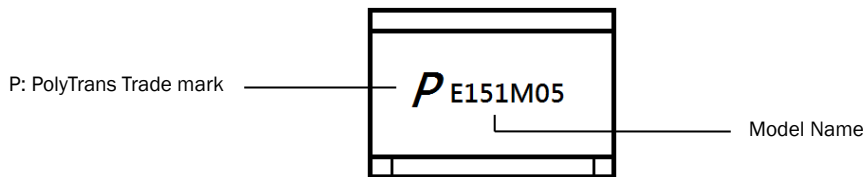


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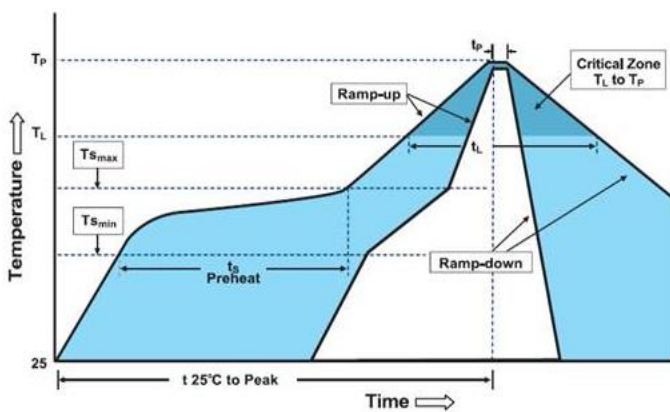
Electrical Characteristics

| Part Number | DC Spark-over Voltage @ 100V/S | Impulse Spark-over Voltage @ 1kV/ μ S | Impulse Discharge Current 8/20 μ s 10 Hits | AC Discharge Current 1s/5 Times | Minimum Insulation Resistance | Maximum Capacitance @ 1.0 MHz | UL Certificate (E474915) |
|-------------|--------------------------------|---|--|------------------------------------|-------------------------------|-------------------------------|--------------------------|
| | (V) | (V) | (kA) | (A) | (G Ω) | (pF) | |
| PG25E075M05 | 75 \pm 20% | \leq 600 | 5 | 5 | 10 | 1.0 | Pending |
| PG25E091M05 | 90 \pm 20% | \leq 600 | 5 | 5 | 10 | 1.0 | Pending |
| PG25E151M05 | 150 \pm 20% | \leq 600 | 5 | 5 | 10 | 1.0 | Pending |
| PG25E201M05 | 200 \pm 20% | \leq 700 | 5 | 5 | 10 | 1.0 | Pending |
| PG25E231M05 | 230 \pm 20% | \leq 700 | 5 | 5 | 10 | 1.0 | Pending |
| PG25E301M05 | 300 \pm 20% | \leq 900 | 5 | 5 | 10 | 1.0 | Pending |
| PG25E351M05 | 350 \pm 20% | \leq 1000 | 5 | 5 | 10 | 1.0 | Pending |
| PG25E401M05 | 400 \pm 20% | \leq 1000 | 5 | 5 | 10 | 1.0 | Pending |
| PG25E471M05 | 470 \pm 20% | \leq 1200 | 5 | 5 | 10 | 1.0 | Pending |
| PG25E601M05 | 600 \pm 20% | \leq 1400 | 5 | 5 | 10 | 1.0 | Pending |

Marking Definitions



Lead Free Reflow Soldering Recommendations



| Profile Feature | Pb-Free Assembly |
|--|-------------------------|
| Average Ramp-Up Rate (T _{Smax} to T _P) | 3°C/second max. |
| Preheat | |
| -Temperature Min (T _{Smin}) | 150°C |
| -Temperature Max (T _{Smax}) | 200°C |
| -Time (T _{Smin} to T _{Smax}) | 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, \leq 70%RH |

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

