

Gas Discharge Tube (GDT) Datasheet

● Features

- Excellent response to fast rising transients
- Stable breakdown voltage
- Low capacitance and Insertion Loss
- High insulation resistance
- Dimensions 4.2*4.2*4.0mm
- Storage and operating temperature: -40°C ~ +85°C
- Reliable to Protect Electrostatic Surge
- High Current Handling Capability @8/20μs;
- Moisture sensitivity level :Level 1

DC Spark-over Voltage
75V to 1000V

● Applications

- Test equipment
- AC Power
- Power supplies
- Telephone Interface, Line cards
- General Telecommunications equipment

● Part Number Code

4240 - 090

DC Spark-over Voltage

Dimensions

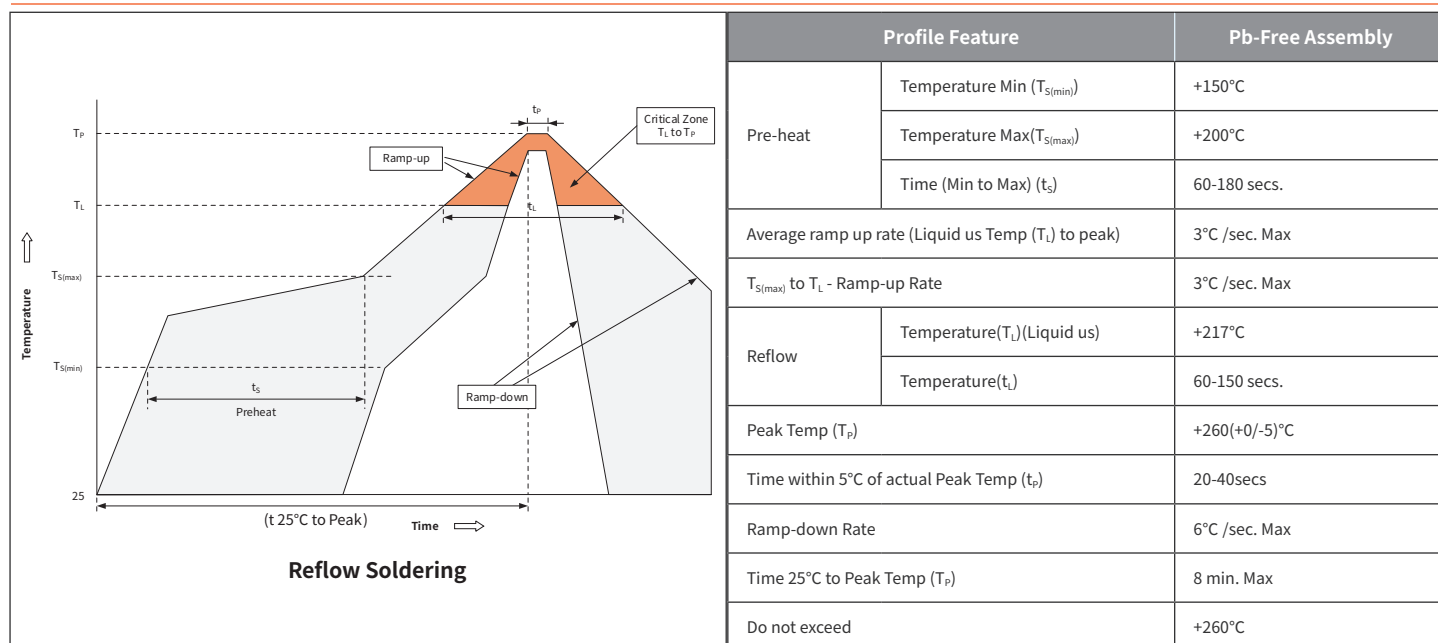


Electrical Characteristics (Ta=25°C Unless otherwise specified)

| Part Number | DC Spark-over Voltage | Maximum Impulse Spark-over Voltage | Nominal Impulse Discharge Current@8/20μs | Impulse Waveform @10/700μs | Impulse Life @10/1000μs | Minimum Insulation Resistance | | Maximum Capacitance |
|-------------|-----------------------|------------------------------------|--|----------------------------|-------------------------|-------------------------------|----|---------------------|
| | 100V/S | 1000V/μs | ±5times | ±5times | 100A | Test Voltage | GΩ | 1MHz |
| | (V) | (V) | (KA) | (KV) | (times) | DC(V) | | (pF) |
| 4240-075 | 75V±30% | 600 | 3 | 6 | 100 | 50 | 1 | 1 |
| 4240-090 | 90V±30% | 600 | 3 | 6 | 100 | 100 | 1 | 1 |
| 4240-150 | 150V±30% | 600 | 3 | 6 | 100 | 100 | 1 | 1 |
| 4240-230 | 230V±30% | 700 | 3 | 6 | 100 | 100 | 1 | 1 |
| 4240-300 | 300V±30% | 850 | 3 | 6 | 100 | 100 | 1 | 1 |
| 4240-350 | 350V±30% | 950 | 3 | 6 | 100 | 100 | 1 | 1 |
| 4240-400 | 400V±30% | 1000 | 3 | 6 | 100 | 100 | 1 | 1 |
| 4240-470 | 470V±30% | 1100 | 3 | 6 | 100 | 100 | 1 | 1 |
| 4240-600 | 600V±30% | 1200 | 3 | 6 | 100 | 100 | 1 | 1 |
| 4240-800 | 800V±30% | 1500 | 3 | 6 | 100 | 100 | 1 | 1 |
| 4240-1000 | 1000V±30% | 1600 | 3 | 6 | 100 | 100 | 1 | 1 |

Note: 4240 Series without Marking.

Recommended Soldering Conditions



● Electrical Ratings

| Items | Test Condition/Description | Requirement |
|------------------------------------|---|-----------------------------|
| DC Spark-over Voltage | The voltage is measured with voltage ramp $dv/dt=100V/s$ | To meet the specified value |
| Maximum Impulse Spark-over Voltage | The maximum impulse spark-over voltage is measured with voltage ramp $dv/dt=1000V/\mu s$. | |
| Impulse Discharge Current | Maximum $8/20\mu s$ surge current that can be applied between two electrodes, 5 positive and 5 negative surges, with 3 minutes interval time. | |
| | | |
| Alternating Discharge Current | Rated RMS value of AC current at 50Hz, 1 sec. for 10 times with interval time 3 min. | |
| Insulation Resistance | The resistance of gas tube shall be measured between two electrodes. | |
| Capacitance | The capacitance of gas tube shall be measured between two electrodes. Test frequency: 1MHz | |

● Physical Dimensions & Recommended Pad Layout

| Symbol | Dimensions | | | |
|--------|-------------|------|--------|-------|
| | Millimeters | | Inches | |
| | Min. | Max. | Min. | Max. |
| A | 3.9 | 4.5 | 0.153 | 0.177 |
| B | 3.9 | 4.5 | 0.153 | 0.177 |
| C | 3.6 | 4.4 | 0.142 | 0.173 |
| D | 0.3 | 0.5 | 0.012 | 0.020 |
| X | 1.2 | 1.4 | 0.047 | 0.055 |
| X1 | 3.5 | 3.7 | 0.138 | 0.146 |
| Y | 4.9 | 5.1 | 0.193 | 0.201 |

4240 SERIES

Surface Mount Gas Discharge Tube

● Ordering Information

| SERIES | SIZE(mm) | DELIVERY MODE | MPQ(pcs) | BOX (pcs) | CARTON(pcs) |
|-------------|-------------|---------------|----------|-----------|-------------|
| 4240 Series | 4.2×4.2×4.0 | 13"REEL | 1,000 | 2,000 | 10,000 |

● Packaging Information

| Symbol | Dimensions(mm) | |
|--------|----------------|-------------|
| | Millimeters | Inches |
| 12 | 12±0.3 | 0.472±0.012 |
| A0 | 4.5±0.1 | 0.177±0.004 |
| B0 | 4.25±0.1 | 0.167±0.004 |
| K0 | 4.5±0.1 | 0.177±0.004 |
| P | 8.0±0.1 | 0.315±0.004 |
| F | 5.5±0.1 | 0.217±0.004 |
| E | 1.75±0.1 | 0.069±0.004 |
| D | 1.5±0.1 | 0.059±0.004 |
| P0 | 4.0±0.1 | 0.157±0.004 |
| P2 | 2.0±0.1 | 0.079±0.004 |
| T | 0.35±0.1 | 0.014±0.004 |

● Important Notice

1. This series is designed, manufactured, and sold exclusively for the domestic market (China).
2. This series is NOT UL Certified, and our company does not market or sell this product for use overseas.
3. If the customer exports this series to overseas markets (including but not limited to North America) without our prior written consent, the customer shall assume all risks and liabilities arising from the product's lack of UL certification.
4. By purchasing, using, or handling this product, the customer is deemed to have fully acknowledged and agreed to all terms stated in this notice.