



- Hybrid SAD-GDT Technology
- UL497B LISTED
- 20kA I_{max} (1x-8/20us)
- 5kA I_{mp} (2x-10/350us)
- 5kA I_n (10x-8/20us)
- Modular
- 2W+SHIELD+G



| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|---|---|---|--|--------------------|---------------------------|----------------|---|----------------|--------|-----------------|----------------|--|---------------|-------------------------|----------------|--|--|------------------|-------------------------|--|----------------|----------------|-------------------------|--|----------|---------------|--|-----------------------|-------------------------|-----|---------------|------------|--|-------------|------------------|-----|----------|-------------|-----|-----------|-------------|-----|-----|------------------|-----|----|------|-----|----|--------------------------|------|---|----------------|------|----|------------------------------|------|---|------------|--------|--------|-----------|-------|----------|-------------------------|------|-----|-------------|------|------|
| | <p>Electrical Characteristics</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>G: 3-electrode gas tube Gb: 2-electrode gas tube R: Resistor D: Clamping diode</p> | <table border="1"> <tr><td>Network</td><td></td><td>RS232, RS485</td></tr> <tr><td>Max. DC operating voltage</td><td>U_c</td><td>15 Vdc</td></tr> <tr><td>Max. frequency</td><td>f max.</td><td>> 3 MHz</td></tr> <tr><td>Insertion loss</td><td></td><td>< 1 dB</td></tr> <tr><td>Max. load current @25°C</td><td>I_L</td><td>300 mA</td></tr> <tr><td>Impulse current 2 x 10/350µs Test - D1 Category</td><td>I_{imp}</td><td>5 kA</td></tr> <tr><td>Nominal discharge current C2 Category</td><td>I_n</td><td>5 kA</td></tr> <tr><td>Line resistance (± 10%)</td><td></td><td>4.7 Ohm</td></tr> <tr><td>DATA SPD TYPE</td><td></td><td>UL497B LISTED</td></tr> <tr><td>VOLTS</td><td>(V)</td><td>12</td></tr> <tr><td>WIRES</td><td></td><td>2W+Shield+G</td></tr> <tr><td>LINE CURRENT MAX</td><td>(A)</td><td>0.3</td></tr> <tr><td>AMBIENT MIN</td><td>(C)</td><td>-40</td></tr> <tr><td>AMBIENT MAX</td><td>(C)</td><td>+85</td></tr> <tr><td>RESIDUAL VOLTAGE</td><td>(V)</td><td>30</td></tr> <tr><td>MCOV</td><td>(V)</td><td>15</td></tr> <tr><td>IN 10 impulses 8/20µs</td><td>(kA)</td><td>5</td></tr> <tr><td>IMAX 8/20µs</td><td>(kA)</td><td>20</td></tr> <tr><td>I_{imp} 10/350µs</td><td>(kA)</td><td>5</td></tr> <tr><td>DATA SPEED</td><td>(Mbps)</td><td>10/100</td></tr> <tr><td>FREQUENCY</td><td>(MHz)</td><td>up to 10</td></tr> <tr><td>INSERTION LOSS (@ FREQ)</td><td>(db)</td><td>< 1</td></tr> <tr><td>CAPACITANCE</td><td>(pF)</td><td>< 50</td></tr> </table> | Network | | RS232, RS485 | Max. DC operating voltage | U _c | 15 Vdc | Max. frequency | f max. | > 3 MHz | Insertion loss | | < 1 dB | Max. load current @25°C | I _L | 300 mA | Impulse current 2 x 10/350µs Test - D1 Category | I _{imp} | 5 kA | Nominal discharge current C2 Category | I _n | 5 kA | Line resistance (± 10%) | | 4.7 Ohm | DATA SPD TYPE | | UL497B LISTED | VOLTS | (V) | 12 | WIRES | | 2W+Shield+G | LINE CURRENT MAX | (A) | 0.3 | AMBIENT MIN | (C) | -40 | AMBIENT MAX | (C) | +85 | RESIDUAL VOLTAGE | (V) | 30 | MCOV | (V) | 15 | IN 10 impulses 8/20µs | (kA) | 5 | IMAX 8/20µs | (kA) | 20 | I _{imp} 10/350µs | (kA) | 5 | DATA SPEED | (Mbps) | 10/100 | FREQUENCY | (MHz) | up to 10 | INSERTION LOSS (@ FREQ) | (db) | < 1 | CAPACITANCE | (pF) | < 50 |
| Network | | RS232, RS485 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. DC operating voltage | U _c | 15 Vdc | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. frequency | f max. | > 3 MHz | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Insertion loss | | < 1 dB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. load current @25°C | I _L | 300 mA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Impulse current 2 x 10/350µs Test - D1 Category | I _{imp} | 5 kA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Nominal discharge current C2 Category | I _n | 5 kA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Line resistance (± 10%) | | 4.7 Ohm | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DATA SPD TYPE | | UL497B LISTED | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VOLTS | (V) | 12 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WIRES | | 2W+Shield+G | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LINE CURRENT MAX | (A) | 0.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AMBIENT MIN | (C) | -40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AMBIENT MAX | (C) | +85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RESIDUAL VOLTAGE | (V) | 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MCOV | (V) | 15 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IN 10 impulses 8/20µs | (kA) | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| IMAX 8/20µs | (kA) | 20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| I _{imp} 10/350µs | (kA) | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DATA SPEED | (Mbps) | 10/100 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| FREQUENCY | (MHz) | up to 10 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| INSERTION LOSS (@ FREQ) | (db) | < 1 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CAPACITANCE | (pF) | < 50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <p>Mechanical Characteristics</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <tr><td>Technology</td><td></td><td>GDT+Clamping diode</td></tr> <tr><td>Connection to Network</td><td></td><td>By screw terminal: cross section 0.5-2.5mm²</td></tr> <tr><td>Format</td><td></td><td>Plug-in DIN box</td></tr> <tr><td>Failsafe mode</td><td></td><td>Short-circuit</td></tr> <tr><td>TECHNOLOGY</td><td></td><td>SAD-GDT</td></tr> <tr><td>NETWORK CONFIGURATION</td><td></td><td>1 Channel (2W+SHIELD+G)</td></tr> <tr><td>CONNECTION METHOD</td><td></td><td>Screw terminal</td></tr> <tr><td>MOUNTING</td><td></td><td>Din rail</td></tr> <tr><td>MATERIAL</td><td></td><td>Thermoplastic UL94-V0</td></tr> <tr><td>NEMA RATING (IP RATING)</td><td></td><td>NEMA 2 (IP20)</td></tr> <tr><td>DIMENSIONS</td><td></td><td>See diagram</td></tr> <tr><td>WEIGHT</td><td></td><td>0.30 lbs</td></tr> <tr><td>SPARE PART</td><td></td><td>DLAM-12D3</td></tr> </table> | Technology | | GDT+Clamping diode | Connection to Network | | By screw terminal: cross section 0.5-2.5mm ² | Format | | Plug-in DIN box | Failsafe mode | | Short-circuit | TECHNOLOGY | | SAD-GDT | NETWORK CONFIGURATION | | 1 Channel (2W+SHIELD+G) | CONNECTION METHOD | | Screw terminal | MOUNTING | | Din rail | MATERIAL | | Thermoplastic UL94-V0 | NEMA RATING (IP RATING) | | NEMA 2 (IP20) | DIMENSIONS | | See diagram | WEIGHT | | 0.30 lbs | SPARE PART | | DLAM-12D3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Technology | | GDT+Clamping diode | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connection to Network | | By screw terminal: cross section 0.5-2.5mm ² | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Format | | Plug-in DIN box | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Failsafe mode | | Short-circuit | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TECHNOLOGY | | SAD-GDT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NETWORK CONFIGURATION | | 1 Channel (2W+SHIELD+G) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CONNECTION METHOD | | Screw terminal | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MOUNTING | | Din rail | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MATERIAL | | Thermoplastic UL94-V0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NEMA RATING (IP RATING) | | NEMA 2 (IP20) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DIMENSIONS | | See diagram | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WEIGHT | | 0.30 lbs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SPARE PART | | DLAM-12D3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <p>Standards</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <tr><td>Certification</td><td></td><td>UL Listed</td></tr> <tr><td>UL STANDARD</td><td></td><td>UL497B</td></tr> <tr><td>UL CATEGORY</td><td></td><td>QVGQ</td></tr> <tr><td>UL FILE NUMBER</td><td></td><td>E184939</td></tr> <tr><td>STANDARDS</td><td></td><td>IEC 61643-11, NOM-003-SCFI-2014, NOM-001-SCFI-1993</td></tr> <tr><td>ENVIRONMENTAL STANDARDS</td><td></td><td>ROHS</td></tr> </table> | Certification | | UL Listed | UL STANDARD | | UL497B | UL CATEGORY | | QVGQ | UL FILE NUMBER | | E184939 | STANDARDS | | IEC 61643-11, NOM-003-SCFI-2014, NOM-001-SCFI-1993 | ENVIRONMENTAL STANDARDS | | ROHS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Certification | | UL Listed | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| UL STANDARD | | UL497B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| UL CATEGORY | | QVGQ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| ENVIRONMENTAL STANDARDS | | ROHS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <p>Part number</p> <p>6402011</p> | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |



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