



CITEL

B180-24D3



- Hybrid SAD-GDT Technology
- UL497B LISTED
- 20kA I_{max}
- 5kA I_{imp}
- 5kA I_n



| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| | Electrical Characteristics | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| <p>G: 3-electrode gas tube R: Resistor D3: 3-pole clamping diode</p> | <table border="1"> <tr> <td>Network</td> <td></td> <td>LS, 4-20 mA</td> </tr> <tr> <td>Max. DC operating voltage</td> <td>U_c</td> <td>28 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>Protection mode(s)</td> <td></td> <td>Common/Differential mode</td> </tr> <tr> <td>Protection Level C3 (10/1000µs), 300 applications@10 A, X-X (Line/Line)</td> <td>U_p</td> <td>40 V</td> </tr> <tr> <td>Protection level C3 (10/1000µs), 300 applications@10 A, X-C (Line/Earth)</td> <td>U_p</td> <td>20 V</td> </tr> <tr> <td>DATA SPD TYPE</td> <td></td> <td>UL497B LISTED</td> </tr> <tr> <td>VOLTS</td> <td>(V)</td> <td>24</td> </tr> <tr> <td>WIRES</td> <td></td> <td>2W+GROUND</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>-50</td> </tr> <tr> <td>AMBIENT MAX</td> <td>(C)</td> <td>+85</td> </tr> <tr> <td>RESIDUAL VOLTAGE</td> <td>(V)</td> <td>40</td> </tr> <tr> <td>MCOV</td> <td>(V)</td> <td>28/</td> </tr> <tr> <td>I_N 10 impulses 8/20µs</td> <td>(kA)</td> <td>5</td> </tr> <tr> <td>I_{MAX} 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>up to 10MHz</td> </tr> </table> | | Network | | LS, 4-20 mA | Max. DC operating voltage | U _c | 28 Vdc | Max. frequency | f max. | > 3 MHz | Insertion loss | | < 1 dB | Protection mode(s) | | Common/Differential mode | Protection Level C3 (10/1000µs), 300 applications@10 A, X-X (Line/Line) | U _p | 40 V | Protection level C3 (10/1000µs), 300 applications@10 A, X-C (Line/Earth) | U _p | 20 V | DATA SPD TYPE | | UL497B LISTED | VOLTS | (V) | 24 | WIRES | | 2W+GROUND | LINE CURRENT MAX | (A) | 0.3 | AMBIENT MIN | (C) | -50 | AMBIENT MAX | (C) | +85 | RESIDUAL VOLTAGE | (V) | 40 | MCOV | (V) | 28/ | I _N 10 impulses 8/20µs | (kA) | 5 | I _{MAX} 8/20µs | (kA) | 20 | I _{imp} 10/350µs | (kA) | 5 | DATA SPEED | (Mbps) | up to 10MHz |
| Network | | LS, 4-20 mA | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. DC operating voltage | U _c | 28 Vdc | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Max. frequency | f max. | > 3 MHz | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Insertion loss | | < 1 dB | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Protection mode(s) | | Common/Differential mode | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Protection Level C3 (10/1000µs), 300 applications@10 A, X-X (Line/Line) | U _p | 40 V | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Protection level C3 (10/1000µs), 300 applications@10 A, X-C (Line/Earth) | U _p | 20 V | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DATA SPD TYPE | | UL497B LISTED | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| VOLTS | (V) | 24 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WIRES | | 2W+GROUND | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| LINE CURRENT MAX | (A) | 0.3 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AMBIENT MIN | (C) | -50 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| AMBIENT MAX | (C) | +85 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| RESIDUAL VOLTAGE | (V) | 40 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MCOV | (V) | 28/ | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| I _N 10 impulses 8/20µs | (kA) | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| I _{MAX} 8/20µs | (kA) | 20 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| I _{imp} 10/350µs | (kA) | 5 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DATA SPEED | (Mbps) | up to 10MHz | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Mechanical Characteristics | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <tr> <td>Technology</td> <td colspan="2">GDT+TVS diode</td> </tr> <tr> <td>Connection to Network</td> <td colspan="2">By screw terminal: cross section 0.4-1.5mm²</td> </tr> <tr> <td>Format</td> <td colspan="2">Wall mounting box</td> </tr> <tr> <td>Failsafe mode</td> <td colspan="2">Short-circuit - transmission cut-off - fault mode 2</td> </tr> <tr> <td>TECHNOLOGY</td> <td colspan="2">SAD-GDT</td> </tr> <tr> <td>NETWORK CONFIGURATION</td> <td colspan="2">2W+G</td> </tr> <tr> <td>CONNECTION METHOD</td> <td colspan="2">RJ11 Connector</td> </tr> <tr> <td>MOUNTING</td> <td colspan="2">Wall mount</td> </tr> <tr> <td>MATERIAL</td> <td colspan="2">Thermoplastic UL94-V0</td> </tr> <tr> <td>NEMA RATING (IP RATING)</td> <td colspan="2">NEMA 2 (IP20)</td> </tr> <tr> <td>DIMENSIONS</td> <td colspan="2">See diagram</td> </tr> <tr> <td>WEIGHT</td> <td colspan="2">0.30 lbs</td> </tr> <tr> <td>SPARE PART</td> <td colspan="2">n/a</td> </tr> </table> | | Technology | GDT+TVS diode | | Connection to Network | By screw terminal: cross section 0.4-1.5mm ² | | Format | Wall mounting box | | Failsafe mode | Short-circuit - transmission cut-off - fault mode 2 | | TECHNOLOGY | SAD-GDT | | NETWORK CONFIGURATION | 2W+G | | CONNECTION METHOD | RJ11 Connector | | MOUNTING | Wall mount | | MATERIAL | Thermoplastic UL94-V0 | | NEMA RATING (IP RATING) | NEMA 2 (IP20) | | DIMENSIONS | See diagram | | WEIGHT | 0.30 lbs | | SPARE PART | n/a | | | | | | | | | | | | | | | | | | | |
| Technology | GDT+TVS diode | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Connection to Network | By screw terminal: cross section 0.4-1.5mm ² | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Format | Wall mounting box | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Failsafe mode | Short-circuit - transmission cut-off - fault mode 2 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| TECHNOLOGY | SAD-GDT | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NETWORK CONFIGURATION | 2W+G | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| CONNECTION METHOD | RJ11 Connector | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MOUNTING | Wall mount | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MATERIAL | Thermoplastic UL94-V0 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| NEMA RATING (IP RATING) | NEMA 2 (IP20) | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| DIMENSIONS | See diagram | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| WEIGHT | 0.30 lbs | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| SPARE PART | n/a | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Standards | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | <table border="1"> <tr> <td>Certification</td> <td colspan="2">UL 497B</td> </tr> <tr> <td>UL STANDARD</td> <td colspan="2">UL497B</td> </tr> <tr> <td>UL CATEGORY</td> <td colspan="2">QVGG</td> </tr> <tr> <td>UL FILE NUMBER</td> <td colspan="2">E184939</td> </tr> <tr> <td>STANDARDS</td> <td colspan="2">IEC 61643-11, NOM-003-SCFI-2014, NOM-001-SCFI-1993</td> </tr> <tr> <td>ENVIRONMENTAL STANDARDS</td> <td colspan="2">ROHS</td> </tr> </table> | | Certification | UL 497B | | UL STANDARD | UL497B | | UL CATEGORY | QVGG | | UL FILE NUMBER | E184939 | | STANDARDS | IEC 61643-11, NOM-003-SCFI-2014, NOM-001-SCFI-1993 | | ENVIRONMENTAL STANDARDS | ROHS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| Certification | UL 497B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| UL STANDARD | UL497B | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| UL CATEGORY | QVGG | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| UL FILE NUMBER | E184939 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
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| ENVIRONMENTAL STANDARDS | ROHS | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | Part number | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| | 510302 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

