



# SURFACE MOUNT RECTIFIERS

T-03-13

OPERATING/STORAGE TEMPERATURE RANGE -65°C to +150°C

| TYPE | Maximum Peak Reverse Voltage | Maximum Average Rectified Current @ Half-Wave Resistive Load 60Hz |    | Maximum Forward Peak Surge Current @ 8.3ms Superimposed | Maximum Reverse Current @ PRV @ 25° C T <sub>A</sub> | Maximum Forward Voltage @ 25° C T <sub>A</sub> |                 |
|------|------------------------------|---|----|---|--|--|-----------------|
|      | PRV                          | I <sub>o</sub> @ T <sub>A</sub>                                   |    | I <sub>FM</sub> (Surge)                                 | I <sub>R</sub>                                       | I <sub>FM</sub>                                | V <sub>FM</sub> |
|      | V <sub>PK</sub>              | A <sub>AV</sub>   | °C | A <sub>PK</sub>   | mAdc   | A <sub>PK</sub>                                | V <sub>PK</sub> |

## 400 mW SCHOTTKY/MINI MELF DL-35

| TYPE   | Maximum Peak Reverse Voltage (V <sub>PK</sub> ) | Maximum Average Rectified Current (A <sub>AV</sub> )  | Temperature (°C) | Maximum Forward Peak Surge Current (A <sub>PK</sub> ) | Maximum Reverse Current (mAdc) | Maximum Forward Current (I <sub>FM</sub> ) | Maximum Forward Voltage (V <sub>FM</sub> ) |
|--------|---|---|------------------|---|--------------------------------|--|--|
| DL101A | 60  | Power Dissipation = 400 mW at 25°C Terminal Temperature Measured At Device Body. Derate 4mw/°C Above 25°C |                  | 2**   | 200nA @ VR = 50V               | 15mA                                       | 1.0  |
| DL101B | 50  |   |                  | 2**   | 200nA @ VR = 40V               | 15mA                                       | 0.95                                       |
| DL101C | 40  |   |                  | 2**   | 200nA @ VR = 30V               | 15mA                                       | 0.90                                       |
| DL103A | 40  |   |                  | 15  | 5µA @ VR = 30V                 | 200mA                                      | 0.60                                       |
| DL103B | 30  |   |                  | 15  | 5µA @ VR = 20V                 | 200mA                                      | 0.60                                       |
| DL103C | 20  |   |                  | 15  | 5µA @ VR = 10V                 | 200mA                                      | 0.60                                       |
| DL5711 | 70  |   |                  | 2**   | 200nA @ VR = 50V               | 15mA                                       | 1.0  |
| DL6263 | 60  |   |                  | 2**   | 200nA @ VR = 60V               | 15mA                                       | 1.0  |

\*\*10 µSEC Square Wave

## 1.0 AMPERE SCHOTTKY/MELF DL-41

| TYPE   | Maximum Peak Reverse Voltage (V <sub>PK</sub> ) | Maximum Average Rectified Current (A <sub>AV</sub> ) | Temperature (°C) | Maximum Forward Peak Surge Current (A <sub>PK</sub> ) | Maximum Reverse Current (µAdc) | Maximum Forward Current (I <sub>FM</sub> ) | Maximum Forward Voltage (V <sub>FM</sub> ) | Maximum Reverse Recovery Time (nS) |
|--------|---|--|------------------|---|--------------------------------|--|--|------------------------------------|
| DL5817 | 20  | 1.0  | 90               | 30  | 1.0                            | 1.0  | 0.45                                       |                                    |
| DL5818 | 30  | 1.0  | 90               | 30  | 1.0                            | 1.0  | 0.55                                       |                                    |
| DL5819 | 40  | 1.0  | 90               | 30  | 1.0                            | 1.0  | 0.60                                       |                                    |
| DL102  | 20  | 1.0  | 75               | 30  | 1.0                            | 1.0  | 0.50                                       |                                    |
| DL103  | 30  | 1.0  | 75               | 30  | 1.0                            | 1.0  | 0.50                                       |                                    |
| DL104  | 40  | 1.0  | 100              | 30  | 1.0                            | 1.0  | 0.50                                       |                                    |
| DL105  | 50  | 1.0  | 100              | 30  | 1.0                            | 1.0  | 0.70                                       |                                    |
| DL106  | 60  | 1.0  | 100              | 30  | 1.0                            | 1.0  | 0.70                                       |                                    |

OPERATING/STORAGE TEMPERATURE RANGE -65°C to +175°C

| TYPE | Maximum Peak Reverse Voltage | Maximum Average Rectified Current @ Half-Wave Resistive Load 60Hz |    | Maximum Forward Peak Surge Current @ 8.3ms Superimposed | Maximum Reverse Current @ PRV @ 25° C T <sub>A</sub> | Maximum Forward Voltage @ 25° C T <sub>A</sub> |                 | Maximum Reverse Recovery Time |
|------|------------------------------|---|----|---|--|--|-----------------|-------------------------------|
|      | PRV                          | I <sub>o</sub> @ T <sub>A</sub>                                   |    | I <sub>FM</sub> (Surge)                                 | I <sub>R</sub>                                       | I <sub>FM</sub>                                | V <sub>FM</sub> | T <sub>rr</sub>               |
|      | V <sub>PK</sub>              | A <sub>AV</sub>   | °C | A <sub>PK</sub>   | µAdc   | A <sub>PK</sub>                                | V <sub>PK</sub> | nS                            |

## 1.0 AMPERE FAST RECOVERY GLASS PASSIVATED/DL-41

| TYPE   | Maximum Peak Reverse Voltage (V <sub>PK</sub> ) | Maximum Average Rectified Current (A <sub>AV</sub> ) | Temperature (°C) | Maximum Forward Peak Surge Current (A <sub>PK</sub> ) | Maximum Reverse Current (µAdc) | Maximum Forward Current (I <sub>FM</sub> ) | Maximum Forward Voltage (V <sub>FM</sub> ) | Maximum Reverse Recovery Time (nS) |
|--------|---|--|------------------|---|--------------------------------|--|--|------------------------------------|
| DL4933 | 50  | 1.0  | 75               | 30  | 5.0                            | 1.0  | 1.2  | *200                               |
| DL4934 | 100   | 1.0  | 75               | 30  | 5.0                            | 1.0  | 1.2  | *200                               |
| DL4935 | 200   | 1.0  | 75               | 30  | 5.0                            | 1.0  | 1.2  | *200                               |
| DL4936 | 400   | 1.0  | 75               | 30  | 5.0                            | 1.0  | 1.2  | *200                               |
| DL4937 | 600   | 1.0  | 75               | 30  | 5.0                            | 1.0  | 1.2  | *200                               |

NOTE: \*\*T<sub>rr</sub> Test Condition: I<sub>F</sub> = 1.0A, V<sub>R</sub> = 30V..

## 1.0 AMPERE GLASS PASSIVATED/DL-41

| TYPE   | Maximum Peak Reverse Voltage (V <sub>PK</sub> ) | Maximum Average Rectified Current (A <sub>AV</sub> ) | Temperature (°C) | Maximum Forward Peak Surge Current (A <sub>PK</sub> ) | Maximum Reverse Current (µAdc) | Maximum Forward Current (I <sub>FM</sub> ) | Maximum Forward Voltage (V <sub>FM</sub> ) | Maximum Reverse Recovery Time (nS) |
|--------|---|--|------------------|---|--------------------------------|--|--|------------------------------------|
| DL4001 | 50  | 1.0  | 75               | 30  | 5.0                            | 1.0  | 1.1  | —                                  |
| DL4002 | 100   | 1.0  | 75               | 30  | 5.0                            | 1.0  | 1.1  | —                                  |
| DL4003 | 200   | 1.0  | 75               | 30  | 5.0                            | 1.0  | 1.1  | —                                  |
| DL4004 | 400   | 1.0  | 75               | 30  | 5.0                            | 1.0  | 1.1  | —                                  |
| DL4005 | 600   | 1.0  | 75               | 30  | 5.0                            | 1.0  | 1.1  | —                                  |
| DL4006 | 800   | 1.0  | 75               | 30  | 5.0                            | 1.0  | 1.1  | —                                  |
| DL4007 | 1000  | 1.0  | 75               | 30  | 5.0                            | 1.0  | 1.1  | —                                  |