

**NOT RECOMMENDED FOR NEW DESIGNS
USE GS1A-LTP~GS1M-LTP SERIES**



Micro Commercial Components



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DL4001 THRU DL4007

Features

- Glass Passivated Junction
- Low Current Leakage
- Surface Mount Applications
- Lead Free Finish/Rohs Compliant (Note1) ("P" Suffix designates Compliant. See ordering information)
- Epoxy meets UL 94 V-0 flammability rating
- Moisture Sensitivity Level 1

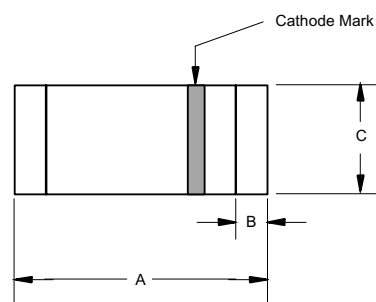
Maximum Ratings

- Operating Temperature: -65°C to +150°C
- Storage Temperature: -65°C to +150°C
- Maximum Thermal Resistance; 30°C/W Junction To Lead

| MCC Part Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|-----------------|----------------|--|---------------------|-----------------------------|
| DL4001 | ----- | 50V | 35V | 50V |
| DL4002 | ----- | 100V | 70V | 100V |
| DL4003 | ----- | 200V | 140V | 200V |
| DL4004 | ----- | 400V | 280V | 400V |
| DL4005 | ----- | 600V | 420V | 600V |
| DL4006 | ----- | 800V | 560V | 800V |
| DL4007 | ----- | 1000V | 700V | 1000V |

1 Amp Glass Passivated Rectifier 50 to 1000 Volts

MELF



| DIM | DIMENSIONS | | | | NOTE |
|-----|------------|------|------|------|---------|
| | INCHES | | MM | | |
| | MIN | MAX | MIN | MAX | |
| A | .185 | .205 | 4.70 | 5.20 | |
| B | .018 | .022 | 0.46 | 0.56 | Nominal |
| C | .095 | .105 | 2.40 | 2.67 | ∅ |

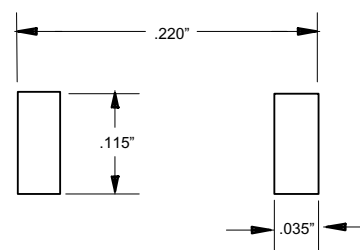
Electrical Characteristics @ 25°C Unless Otherwise Specified

| | | | |
|---|-------------|---------------------------------------|---|
| Average Forward Current | $I_{F(AV)}$ | 1.0A | $T_A = 75^\circ\text{C}$ |
| Peak Forward Surge Current | I_{FSM} | 30A | 8.3ms, half sine |
| Maximum Instantaneous Forward Voltage | V_F | 1.1V | $I_{FM} = 1.0A$; $T_J = 25^\circ\text{C}^*$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | I_R | 5.0 μA 50 μA | $T_J = 25^\circ\text{C}$ $T_J = 125^\circ\text{C}$ |
| Typical Junction Capacitance | C_J | 12pF | Measured at 1.0MHz, $V_R=4.0V$ |

*Pulse test: Pulse width 300 μsec , Duty cycle 2%

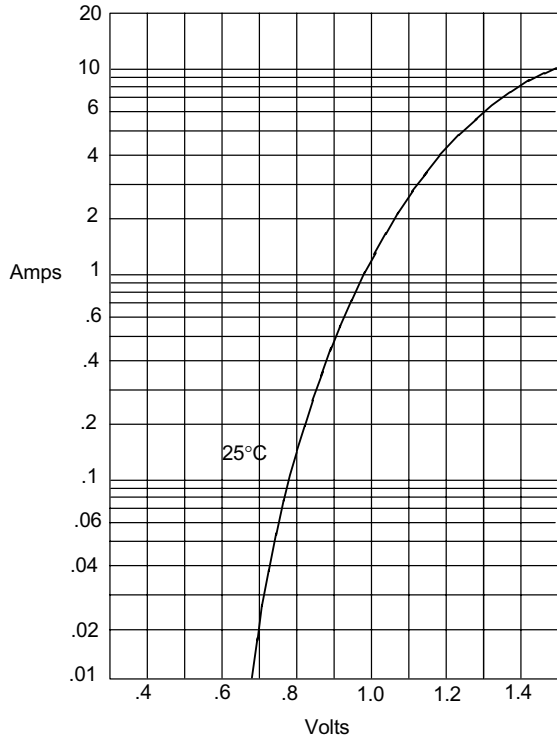
Notes: 1. High Temperature Solder Exemption Applied, see EU Directive Annex Notes 7.

SUGGESTED SOLDER PAD LAYOUT



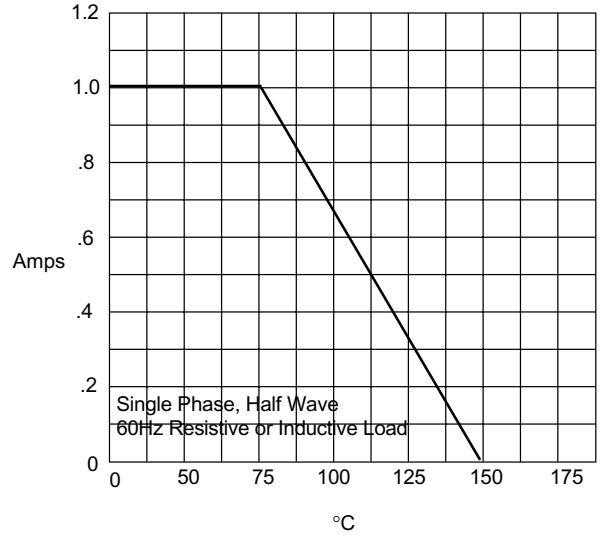
DL4001 thru DL4007

Figure 1
Typical Forward Characteristics



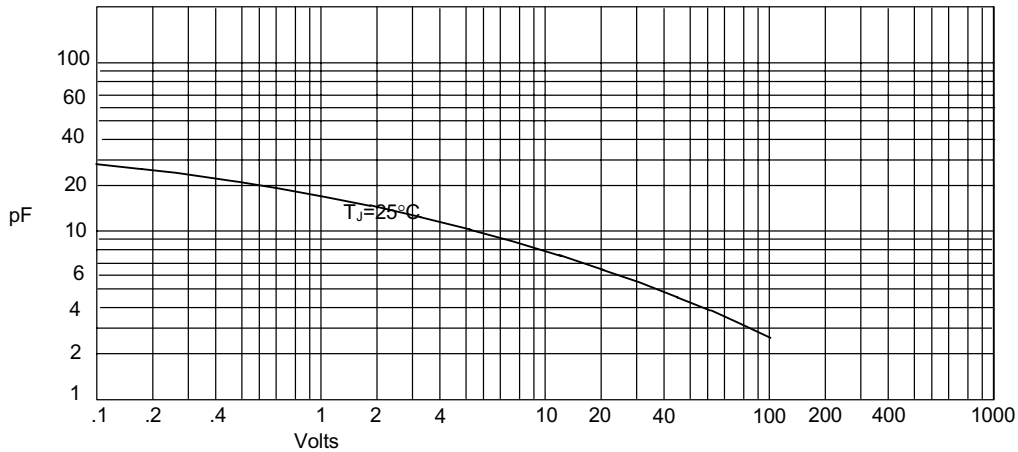
Instantaneous Forward Current - Amperes *versus*
Instantaneous Forward Voltage - Volts

Figure 2
Forward Derating Curve



Average Forward Rectified Current - Amperes *versus*
Ambient Temperature - °C

Figure 3
Junction Capacitance



Junction Capacitance - pF *versus*
Reverse Voltage - Volts



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Ordering Information :

| Device | Packing |
|----------------|-----------------------|
| Part Number-TP | Tape&Reel: 5Kpcs/Reel |

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