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## Maximum Ratings @$T_A$ = 25°C unless otherwise specified

| Characteristic | Symbol | Value | Unit |
|---|---|---|---|
| Peak Repetitive Reverse Voltage<br>Working Peak Reverse Voltage<br>DC Blocking Voltage | $V_{RRM}$<br>$V_{RWM}$<br>$V_R$ | 70 | V |
| Forward Continuous Current (Note 4) | $I_{FM}$ | 70 | mA |
| Non-Repetitive Peak Forward Surge Current @ $t_p$ < 1.0s | $I_{FSM}$ | 800 | mA |

## Thermal Characteristics

| Characteristic | Symbol | Value | Unit |
|---|---|---|---|
| Power Dissipation (Note 4) | $P_D$ | 430 | mW |
| Thermal Resistance Junction to Ambient Air (Note 4) | $R_{\theta JA}$ | 295 | °C/W |
| Operating and Storage Temperature Range | $T_J$, $T_{STG}$ | -65 to +150 | °C |

## Electrical Characteristics @$T_A$ = 25°C unless otherwise specified

| Characteristic | Symbol | Min | Typ | Max | Unit | Test Condition |
|---|---|---|---|---|---|---|
| Reverse Breakdown Voltage (Note 5) | $V_{(BR)R}$ | 70 | - | - | V | $I_R$ = 10μA |
| Forward Voltage | $V_F$ | -<br>-<br>- | -<br>-<br>- | 0.42<br>0.75<br>0.96 | V | $I_F$ = 1.0mA, $T_J$= 25*C<br>$I_F$ = 10mA, $T_J$ = 25*C<br>$I_F$ = 15mA, $T_J$ = 25*C |
| Leakage Current (Note 5) | $I_R$ | -<br>- | -<br>- | 0.1<br>10 | μA | $V_R$ = 50V, $T_J$ = 25*C<br>$V_R$ = 70V, $T_J$ = 25*C |
| Total Capacitance | $C_T$ | - | 1 | - | pF | $V_R$ = 0V, f = 1.0MHz |
| Reverse Recovery Time | $t_{rr}$ | - | 1.6 | - | ns | $I_F$ = $I_R$ = 10mA to IR = 1.0mA,<br>$I_{rr}$ = 0.1 x $I_R$, $R_L$ = 100Ω |

Notes: 4. Device mounted on FR-4 PC board with recommended pad layout, which can be found on our website at http://www.diodes.com.
5. Short duration pulse test used to minimize self-heating effect.

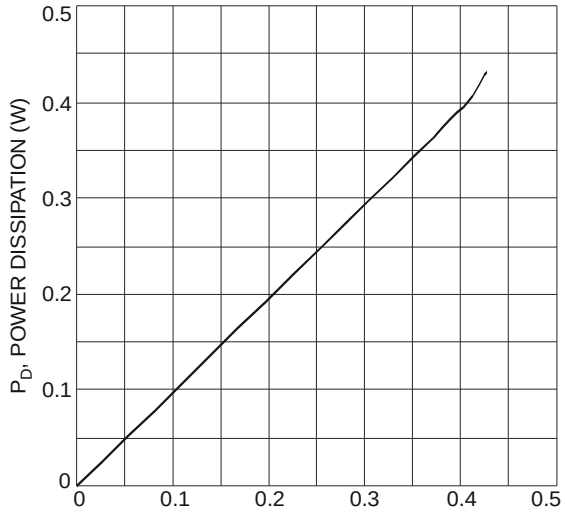

Fig. 1 Forward Power Dissipation

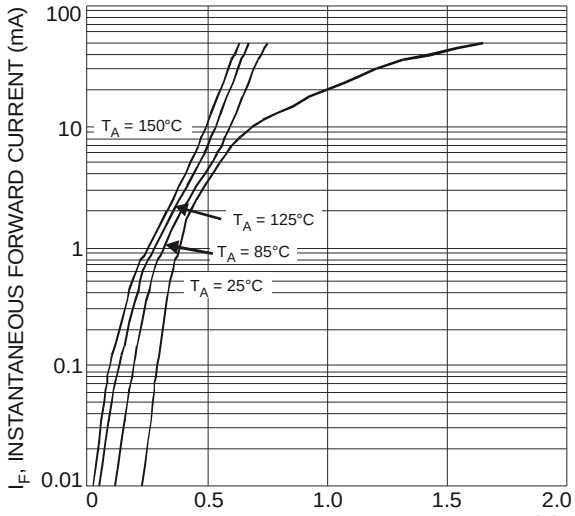

Fig. 2 Typical Forward Characteristics

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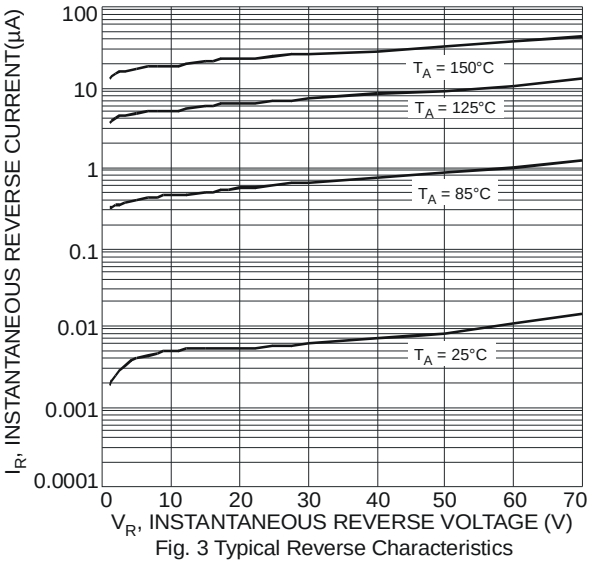



Fig. 3 Typical Reverse Characteristics

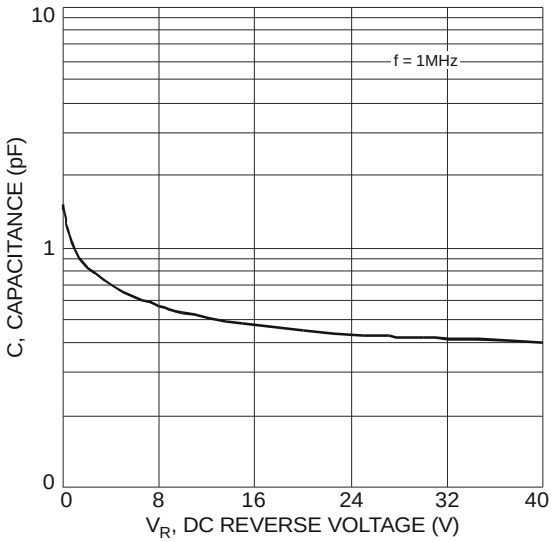



Fig. 4 Total Capacitance vs. Reverse Voltage

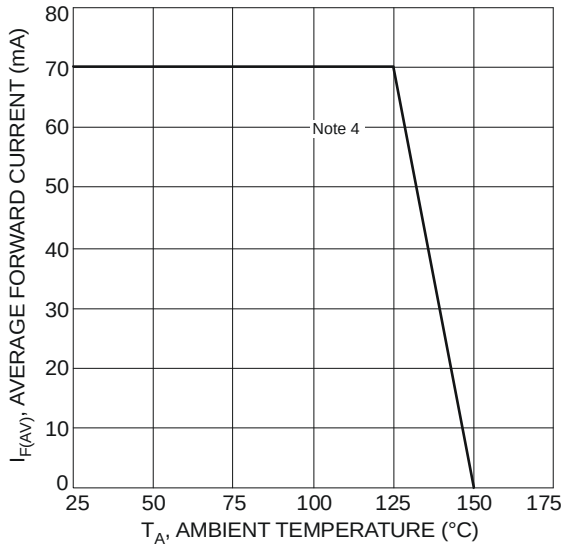



Fig. 5 Forward Current Derating Curve

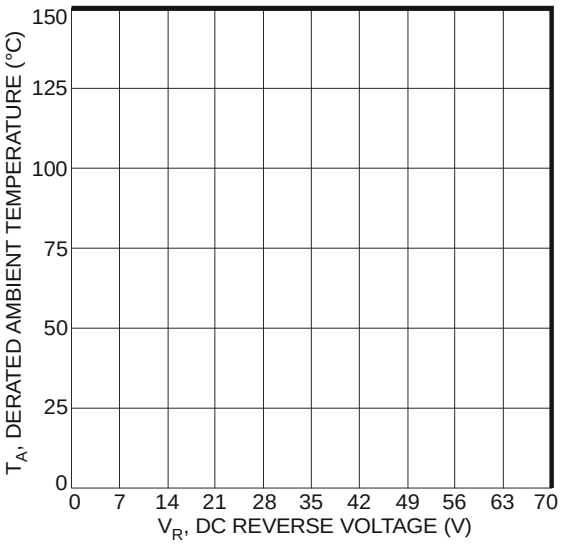
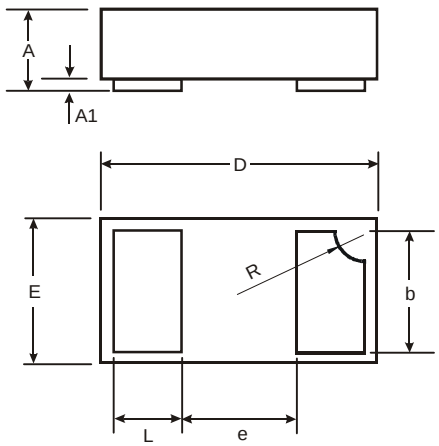



Fig. 6 Operating Temperature Derating

## Package Outline Dimensions




| DFN1006-2 | | | |
|---|---|---|---|
| **Dim** | **Min** | **Max** | **Typ** |
| **A** | 0.47 | 0.53 | 0.50 |
| **A1** | 0 | 0.05 | 0.03 |
| **b** | 0.45 | 0.55 | 0.50 |
| **D** | 0.95 | 1.075 | 1.00 |
| **E** | 0.55 | 0.675 | 0.60 |
| **e** | - | - | 0.40 |
| **L** | 0.20 | 0.30 | 0.25 |
| **R** | 0.05 | 0.15 | 0.10 |
| **All Dimensions in mm** | | | |

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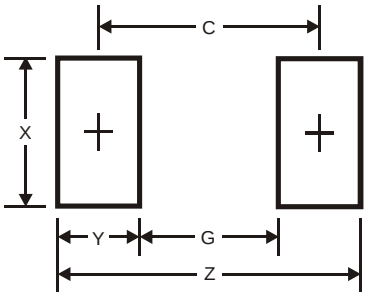
## Suggested Pad Layout




| Dimensions | Value (in mm) |
|---|---|
| Z | 1.1 |
| G | 0.3 |
| X | 0.7 |
| Y | 0.4 |
| C | 0.7 |