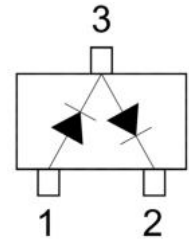


Silicon Epitaxial Planar Switching Diode

FEATURES:

Low leakage switching double diode
For low leakage current applications



SPECIFICATION:

Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

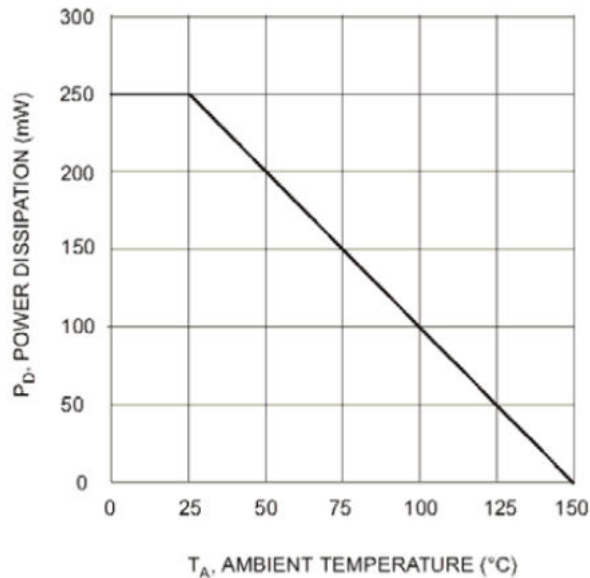
| Parameter | Symbol | Value | Unit |
|--|-----------------|------------------------------------|--------------------|
| Peak Repetitive Reverse Voltage | V_{RRM} | 85 | V |
| Continuous Reverse Voltage | V_R | 85 | V |
| Continuous Forward Current | I_F | 160 | mA |
| | | 140 | |
| Repetitive Peak Forward Current | I_{FRM} | 500 | mA |
| Non-Repetitive Peak Forward Surge Current | I_{FSM} | at $t = 1\text{ }\mu\text{s}$ 4 | A |
| | | at $t = 1\text{ ms}$ 1 | |
| | | at $t = 1\text{ s}$ 0.5 | |
| Power Dissipation | P_D | 250 | mW |
| Thermal Resistance Junction to Ambient Air | $R_{\theta JA}$ | 500 | $^\circ\text{C/W}$ |
| Operating and Storage Temperature Range | T_j, T_{stg} | - 65 to + 150 | $^\circ\text{C}$ |

Electrical Characteristics ($T_a = 25\text{ }^\circ\text{C}$)

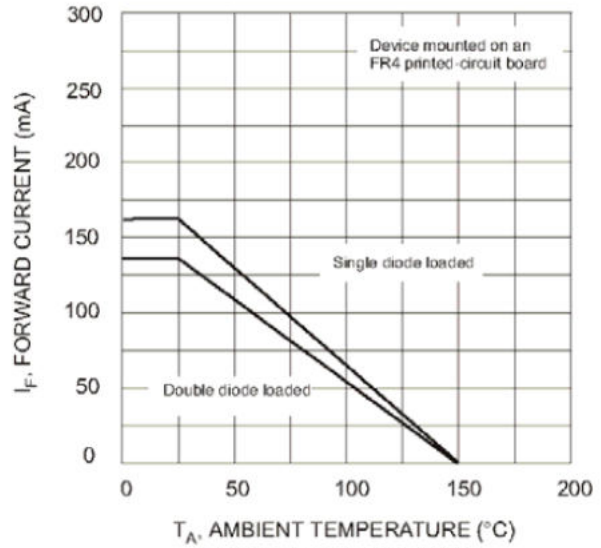
| Parameter | Symbol | Min. | Typ. | Max. | Unit |
|---|---------------------|------|------|---------|---------------|
| Reverse Breakdown Voltage at $I_R = 100\text{ }\mu\text{A}$ | $V_{(BR)R}$ | 85 | - | - | V |
| Forward Voltage at $I_F = 1\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 50\text{ mA}$ at $I_F = 150\text{ mA}$ | V_F | - | - | 0.9 | V |
| | | - | - | 1 | |
| | | - | - | 1.1 | |
| | | - | - | 1.25 | |
| Reverse Current at $V_R = 75\text{ V}$ at $V_R = 75\text{ V}, T_j = 150\text{ }^\circ\text{C}$ | I_R I_{R150} | - | - | 5 80 | nA |
| Total Capacitance at $V_R = 0, f = 1\text{ MHz}$ | C_T | - | 2 | - | pF |
| Reverse Recovery Time at $I_F = I_R = 10\text{ mA}, I_{rr} = 0.1 \times I_R, R_L = 100\text{ }\Omega$ | t_{rr} | - | - | 3 | μs |

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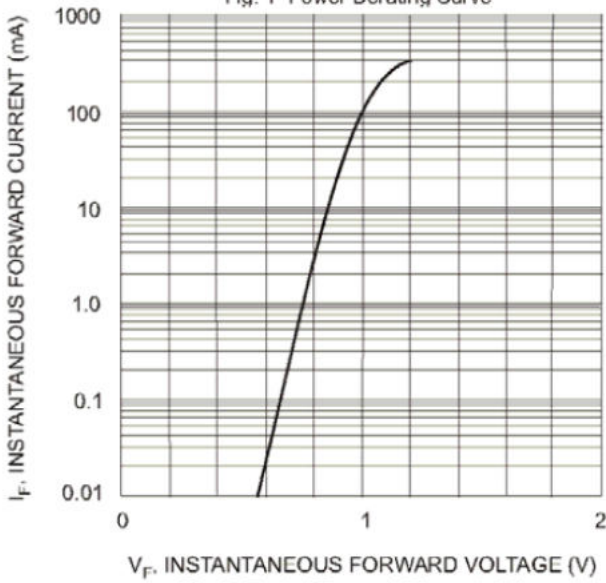
Silicon Epitaxial Planar Switching Diode



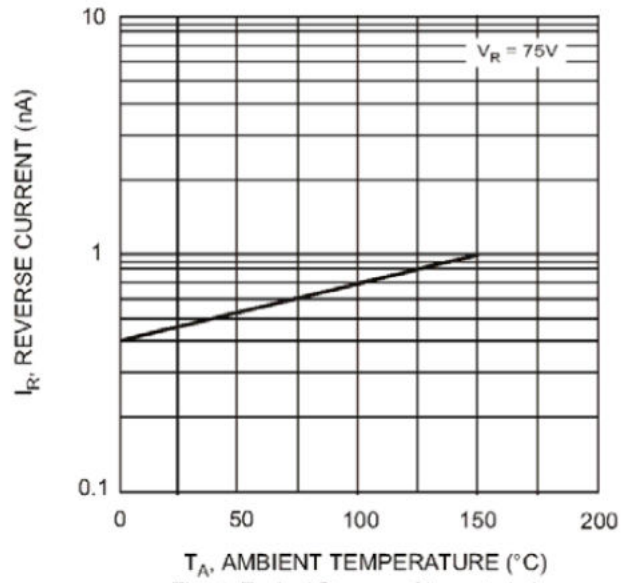
T_A, AMBIENT TEMPERATURE (°C)
Fig. 1 Power Derating Curve



T_A, AMBIENT TEMPERATURE (°C)
Fig. 2 Current Derating Curve



V_F, INSTANTANEOUS FORWARD VOLTAGE (V)
Fig. 3 Typical Forward Characteristics



T_A, AMBIENT TEMPERATURE (°C)
Fig. 4 Typical Reverse Characteristics