

**DCF010**

Silicon Epitaxial Planar Type (Anode Common)

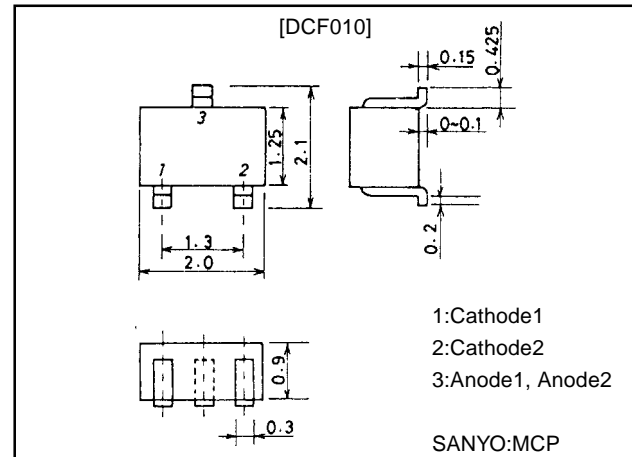
Ultrahigh-Speed Switching Diode**Features**

- Ideally suited for use in hybrid ICs because of very small-sized package.
- Fast switching speed.
- Small interterminal capacitance.

Package Dimensions

unit:mm

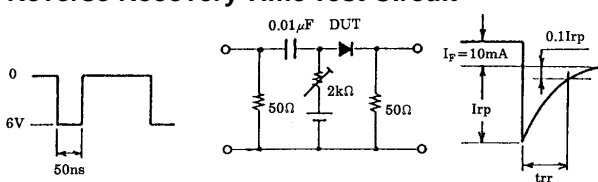
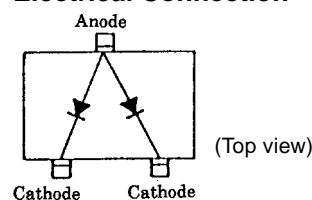
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**Specifications****Absolute Maximum Ratings at Ta = 25°C**

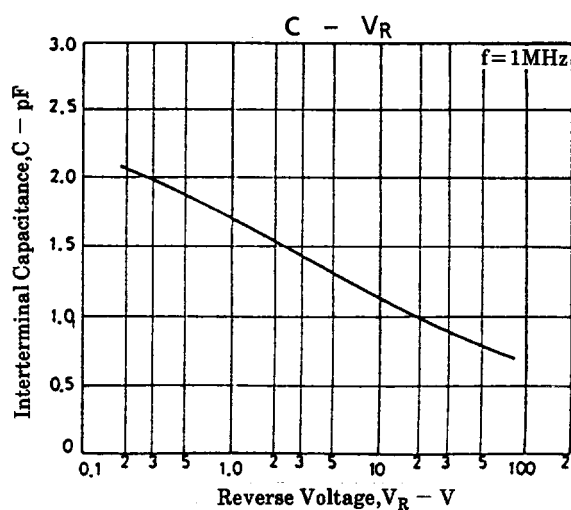
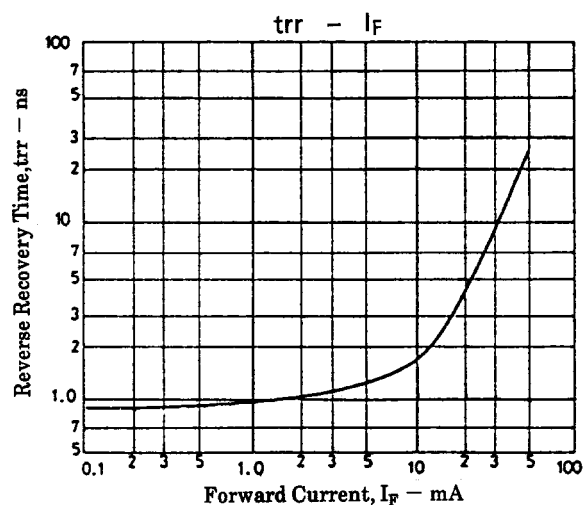
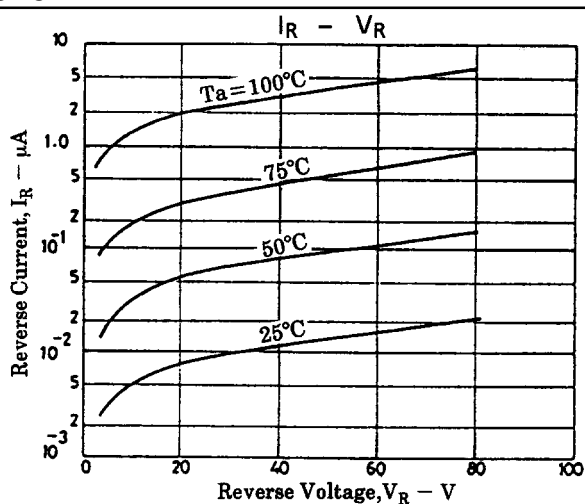
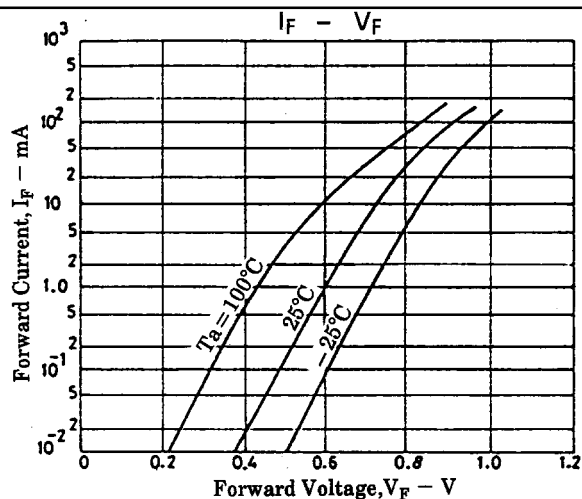
| Parameter | Symbol | Conditions | Ratings | Unit |
|-----------------------------|-----------|--------------|-------------|------|
| Peak Reverse Voltage | V_{RM} | | 85 | V |
| Reverse Voltage | V_R | | 80 | V |
| Peak Forward Current | I_{FM} | Unit rating | 300 | mA |
| | | Total rating | 450 | mA |
| Average Rectified Current | I_O | Unit rating | 100 | mA |
| | | Total rating | 150 | mA |
| Surge Current (1 μ s) | I_{FSM} | Unit rating | 4 | A |
| | | total rating | 6 | A |
| Allowable Power Dissipation | P | | 100 | mW |
| Junction Temperature | T_J | | 125 | °C |
| Storage Temperature | T_{stg} | | -55 to +125 | °C |

Electrical Characteristics at Ta = 25°C

| Parameter | Symbol | Conditions | Ratings | | | Unit |
|---------------------------|----------|----------------------------------------------------|---------|------|------|---------|
| | | | min | typ | max | |
| Forward Voltage | V_{F1} | $I_F=1mA$ | | 0.61 | | V |
| | V_{F2} | $I_F=10mA$ | | 0.74 | | V |
| | V_{F3} | $I_F=100mA$ | | | 1.20 | V |
| Reverse Current | I_{R1} | $V_R=30V$ | | | 0.1 | μ A |
| | I_{R2} | $V_R=80V$ | | | 0.5 | μ A |
| Interterminal Capacitance | C | $V_R=0V, f=1MHz$ | | | 4.0 | pF |
| Reverse Recovery Time | t_{rr} | $I_F=10mA, V_R=6V, R_L=50\Omega, I_{rr}=0.1I_{rp}$ | | | 4.0 | ns |

Reverse Recovery Time Test Circuit**Electrical Connection**

DCF010



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