

CDBK0520L

$I_o = 500 \text{ mA}$
 $V_R = 20 \text{ Volts}$
 RoHS Device

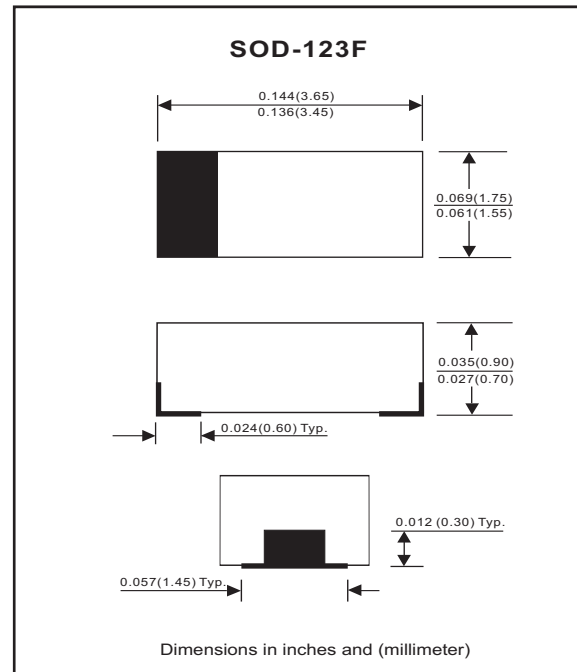


Features

- Low forward voltage.
- Designed for mounting on small surface.
- Extremely thin / leadless package.
- Majority carrier conduction.

Mechanical data

- Case: SOD-123F standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Mounting position: Any
- Weight: 0.011 gram(approx.).



Maximum Rating (at TA=25°C unless otherwise noted)

| Parameter | Conditions | Symbol | Min | Typ | Max | Unit |
|-----------------------------------|---|-----------|-----|-----|------|------|
| Peak reverse voltage | | V_{RM} | | | 20 | V |
| Reverse voltage | | V_R | | | 20 | V |
| Average forward rectified current | | I_o | | | 0.5 | A |
| Forward current, surge peak | 8.3 ms single half sine-wave superimposed on rate load (JEDEC method) | I_{FSM} | | | 5.5 | A |
| Storage temperature | | T_{STG} | -40 | | +125 | °C |
| Junction temperature | | T_j | | | +125 | °C |

Electrical Characteristics (at TA=25°C unless otherwise noted)

| Parameter | Conditions | Symbol | Min | Typ | Max | Unit |
|-------------------------------|--|----------|-----|-----|--------------------------|------|
| Forward voltage | $I_F = 100\text{mA}$ @Ta = 25 °C $I_F = 500\text{mA}$ @Ta = 25 °C $I_F = 100\text{mA}$ @Ta = 100 °C $I_F = 500\text{mA}$ @Ta = 100 °C | V_F | | | 300 385 220 330 | mV |
| Reverse current | $V_R = 10\text{V}$ @Ta = 25 °C $V_R = 20\text{V}$ @Ta = 25 °C | I_R | | | 75 250 | uA |
| Capacitance between terminals | f = 1 MHz, and 0 VDC reverse voltage | C_T | | | 170 | pF |
| Reverse recovery time | $I_F = I_R = 10\text{mA}$, $I_{rr} \times I_R$, $R_L = 100\text{ohm}$ | T_{rr} | | 22 | | ns |

RATING AND CHARACTERISTIC CURVES (CDBK0520L)

Fig. 1 - Forward characteristics

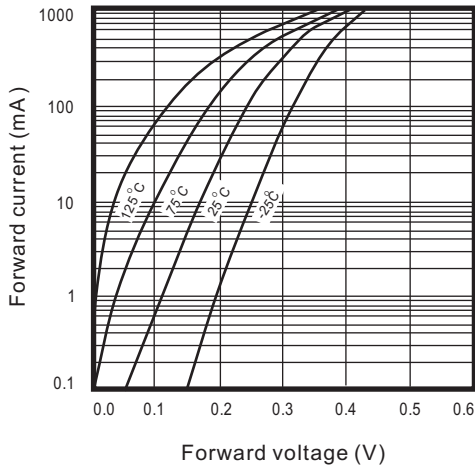


Fig. 2 - Reverse characteristics

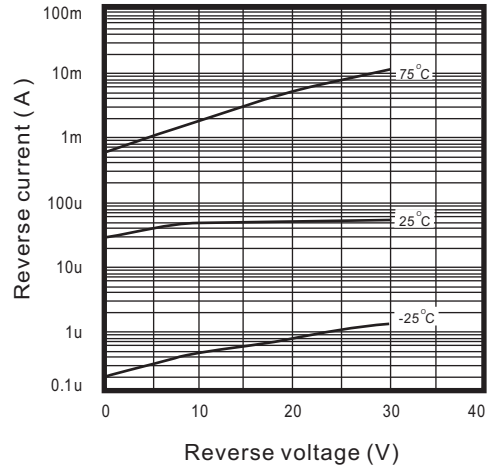


Fig. 3 - Capacitance between terminals characteristics

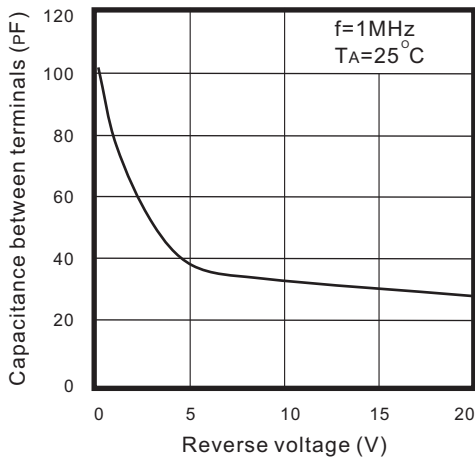


Fig. 4 - Current derating curve

