

SMD Schottky Barrier Diode

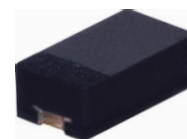


SMD Diodes Specialist

CDBF40 (RoHs Device)

$I_o = 200 \text{ mA}$

$V_R = 40 \text{ Volts}$

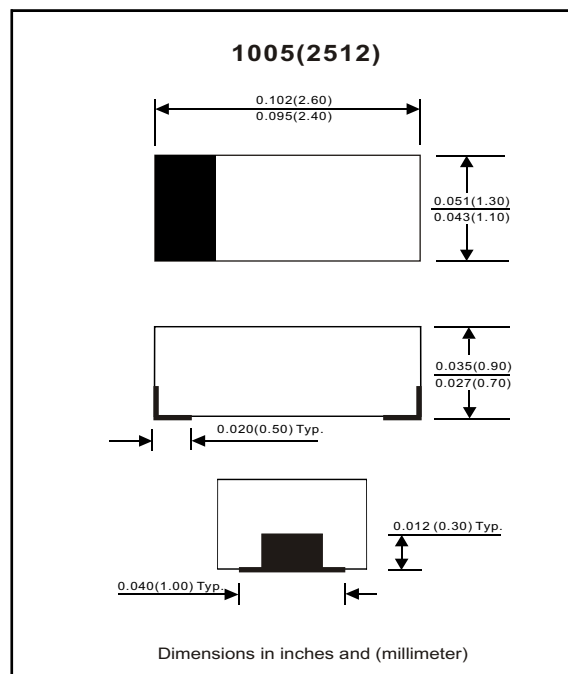


Features

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

Mechanical data

- Case: 1005(2512) standard package, molded plastic.
- Terminals: Gold plated, solderable per MIL-STD-750, method 2026.
- Polarity: Indicated by cathode band.
- Mounting position: Any
- Weight: 0.006 gram(approx.).



Maximum Rating (at $T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Peak reverse voltage		V_{RM}			40	V
Reverse voltage		V_R			40	V
RMS reverse voltage		$V_{R(RMS)}$			28	V
Average forward rectified current		I_o			200	mA
Forward current,surge peak	8.3 ms single half sine-wave superimposed on rate load(JEDEC method)	I_{FSM}			0.6	A
Power dissipation		P_D			200	mW
Storage temperature		T_{STG}	-65		+125	$^{\circ}\text{C}$
Junction temperature		T_j			+125	$^{\circ}\text{C}$

Electrical Characteristics (at $T_A=25^{\circ}\text{C}$ unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F = 1 \text{ mA}$ $I_F = 40 \text{ mA}$	V_F			0.38 1	V
Reverse current	$V_R = 30 \text{ V}$	I_R			0.2	μA
Capacitance between terminals	$f = 1 \text{ MHz}$, and 0 VDC reverse voltage	C_T			5	pF
Reverse recovery time	$I_F=I_R=10 \text{ mA}$, $I_{rr}=0.1 \times I_R$, $R_L=100 \text{ ohm}$	T_{rr}			5	nS

REV:B

RATING AND CHARACTERISTIC CURVES (CDBF40)

Fig. 1 - Forward characteristics

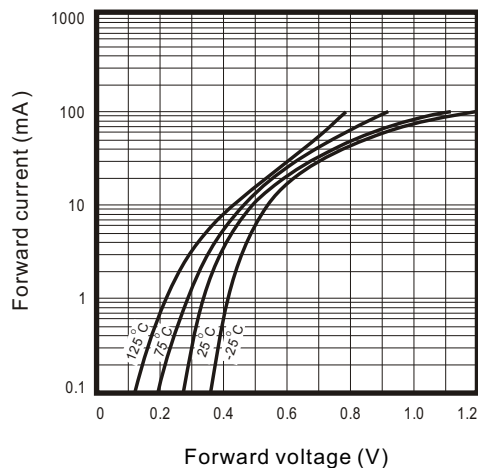


Fig. 2 - Reverse characteristics

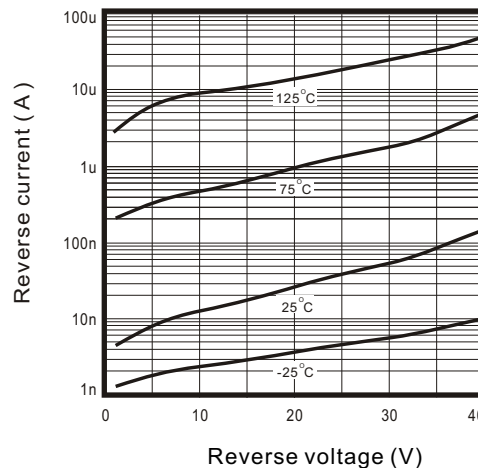


Fig.3 - Capacitance between terminals characteristics

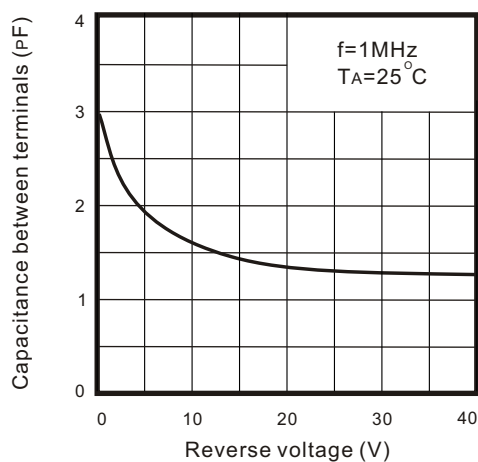


Fig.4 - Current derating curve

