

SMD Schottky Barrier Diode

COMCHIP
SMD Diodes Specialist

CDBFR0140R(RoHs Device)

$I_o = 100 \text{ mA}$

$V_R = 40 \text{ Volts}$



Features

Low reverse current.

Designed for mounting on small surface.

Extremely thin / leadless package.

Majority carrier conduction.

Mechanical data

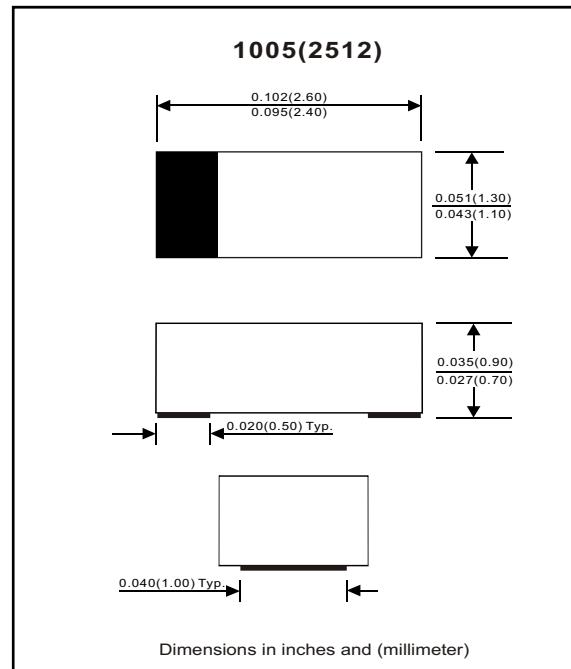
Case: 1005(2512) standard package,
molded plastic.

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
Repetitive Peak reverse voltage		V_{RRM}			45	V
Reverse voltage		V_R			40	V
Average forward rectified current		I_o			100	mA
Forward current,surge peak	8.3 ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}			1	A
Storage temperature		T_{STG}	-40		+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	$I_F = 10\text{mA}$	V_F			0.45	V
Reverse current	$V_R = 10\text{V}$	I_R			1	uA
Capacitance between terminals	$f = 1 \text{ MHz}, \text{and } 10 \text{ VDC reverse voltage}$	C_T		6		pF

RATING AND CHARACTERISTIC CURVES (CDBFR0140R)

Fig. 1 - Forward characteristics

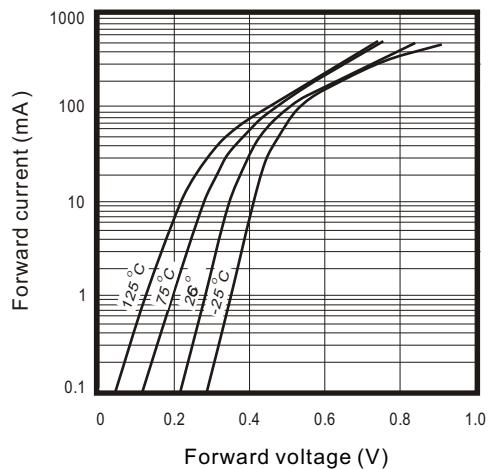


Fig. 2 - Reverse characteristics

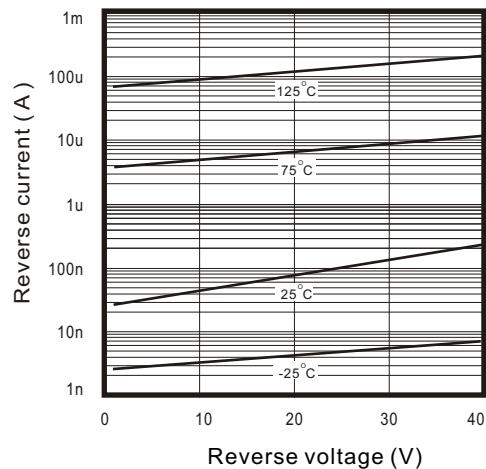


Fig. 3 - Capacitance between terminals characteristics

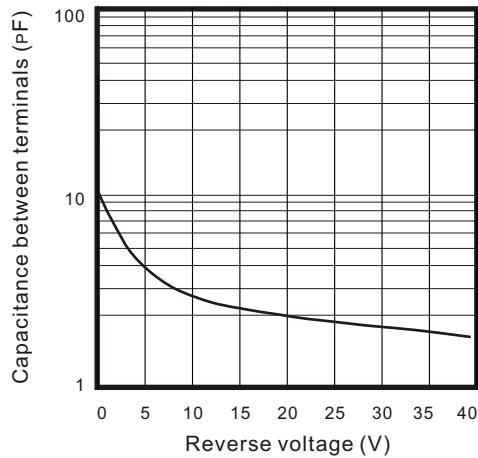


Fig.4 - Current derating curve

