

# SMD Schottky Barrier Diode

**COMCHIP**  
SMD Diodes Specialist

## CDBFR001A (RoHs Device)

**I<sub>o</sub> = 100mA**

**V<sub>R</sub> = 30 Volts**



### Features

Designed for mounting on small surface.

Extremely thin package.

Low stored charge.

Majority carrier conduction.

### Mechanical data

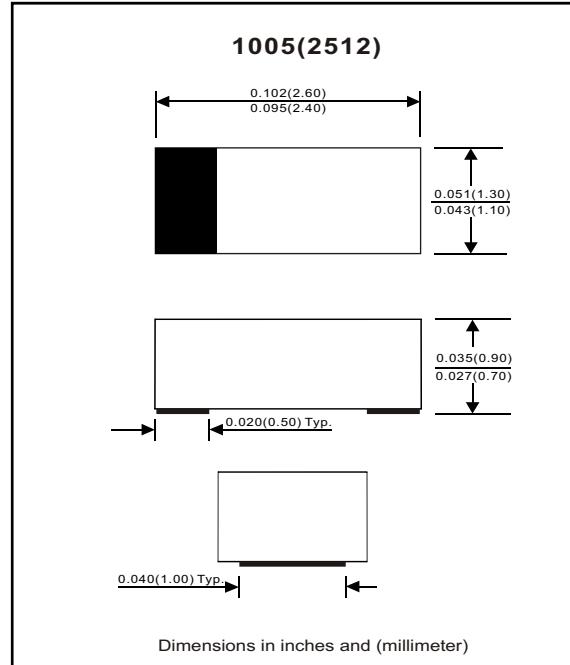
Case: 1005(2512) standard package,  
molded plastic.

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 TA=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Repetitive Peak reverse voltage		V <sub>RRM</sub> , V <sub>R</sub>			30	V
Average forward current		I <sub>o</sub>			100	mA
Forward current,surge peak	8.3 ms single half sine-wave superimposed on rate load(JEDEC method)	I <sub>FSM</sub>		500		mA
Power Dissipation		P <sub>D</sub>			150	mW
Sunction temperature		T <sub>TG</sub>	-40		+125	°C
Junction temperature		T <sub>j</sub>			+125	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage 1	I <sub>F</sub> = 0.1 mA DC	V <sub>F</sub>			0.24	V
Forward voltage 2	I <sub>F</sub> = 1 mA DC	V <sub>F</sub>			0.32	V
Forward voltage 3	I <sub>F</sub> = 10 mA DC	V <sub>F</sub>			0.40	V
Forward voltage 4	I <sub>F</sub> = 30 mA DC	V <sub>F</sub>			0.50	V
Forward voltage 5	I <sub>F</sub> = 100 mA DC	V <sub>F</sub>			1.00	V
Reverse current	V <sub>R</sub> = 25V	I <sub>R</sub>			2	uA
Capacitance between terminals	F = 1 MHZ and 10 VDC reverse voltage	C <sub>T</sub>			6	pF

## RATING AND CHARACTERISTIC CURVES (CDBFR001A)

Fig. 1 - Forward characteristics

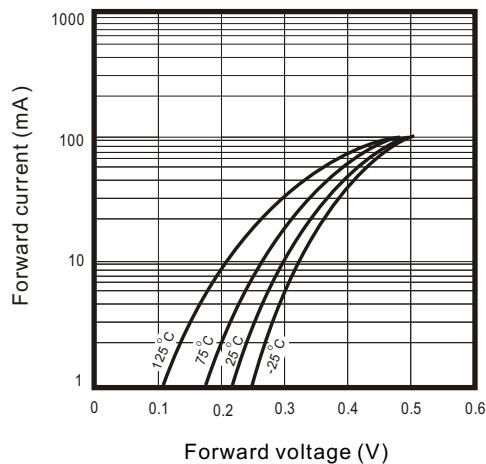


Fig. 2 - Reverse characteristics

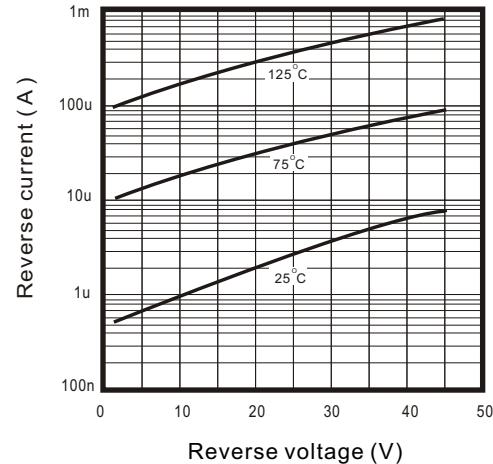


Fig.3 - Capacitance between terminals characteristics

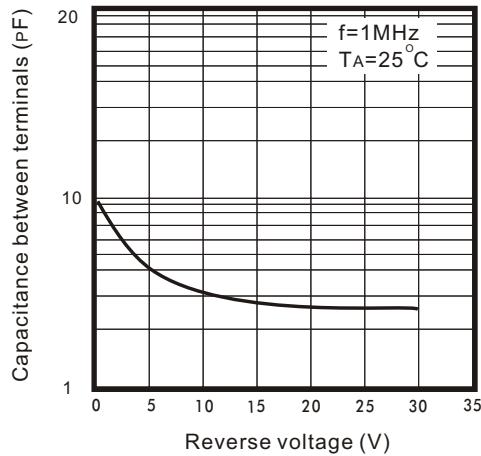


Fig.4 - Current derating curve

