

# SMD Schottky Barrier Diode

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## CDBS001A

**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

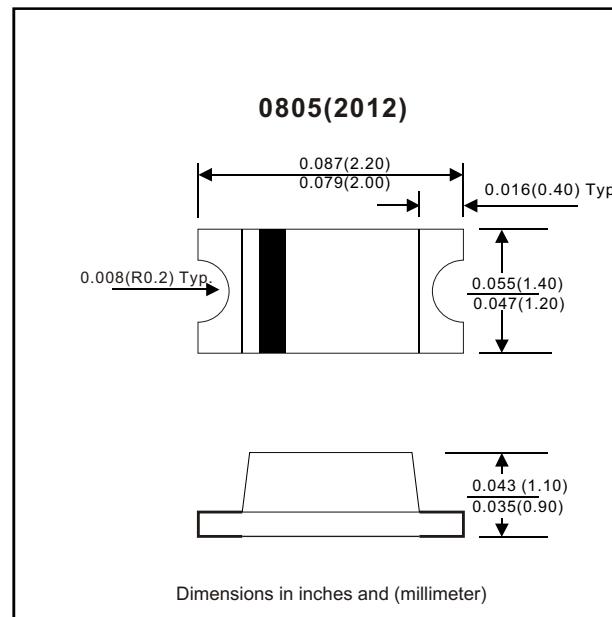
Case: 0805(2012) Standard package, molded plastic

Terminals: Solder plated, solderable per MIL-STD-750, method 2026

Polarity: Indicated by cathode band

Mounting position: Any

Weight: 0.0048 gram (approximately)



### 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>		1000		mA
Capacitance between terminals	F=1MHz and 10 VDC reverse voltage	C <sub>T</sub>			6	pF
Power Dissipation		P <sub>D</sub>			300	mW
Storage temperature		T <sub>STG</sub>	-40		+125	°C
Junction temperature		T <sub>j</sub>	-40		+125	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage 1	IF = 0.1 mA DC	V <sub>F</sub>			0.24	V
Forward voltage 2	IF = 1 mA DC	V <sub>F</sub>			0.32	V
Forward voltage 3	IF = 10 mA DC	V <sub>F</sub>			0.40	V
Forward voltage 4	IF = 30 mA DC	V <sub>F</sub>			0.50	V
Forward voltage 5	IF = 100 mA DC	V <sub>F</sub>			1.00	V
Reverse current	V <sub>R</sub> = 25 V	I <sub>R</sub>			2	uA

## RATING AND CHARACTERISTIC CURVES (CDBS001A)

Fig. 1 - Forward characteristics

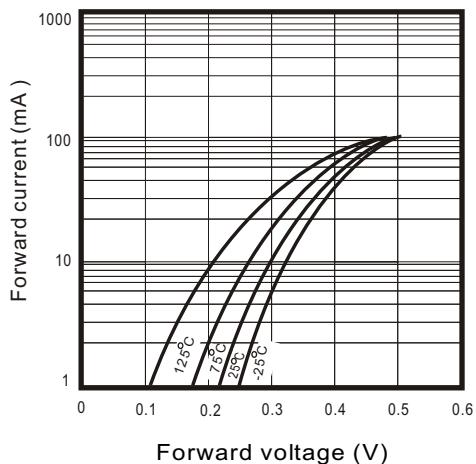


Fig. 2 - Reverse characteristics

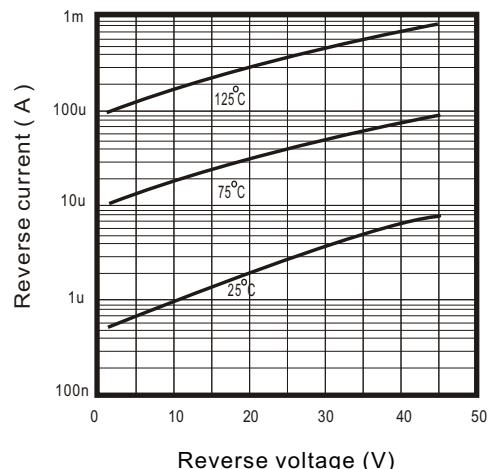


Fig. 3 - Capacitance between terminals characteristics

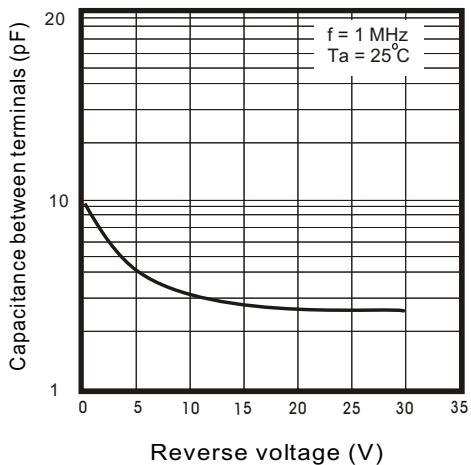


Fig. 4 - Current derating curve

