SMD Schottky Barrier Diode

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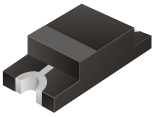
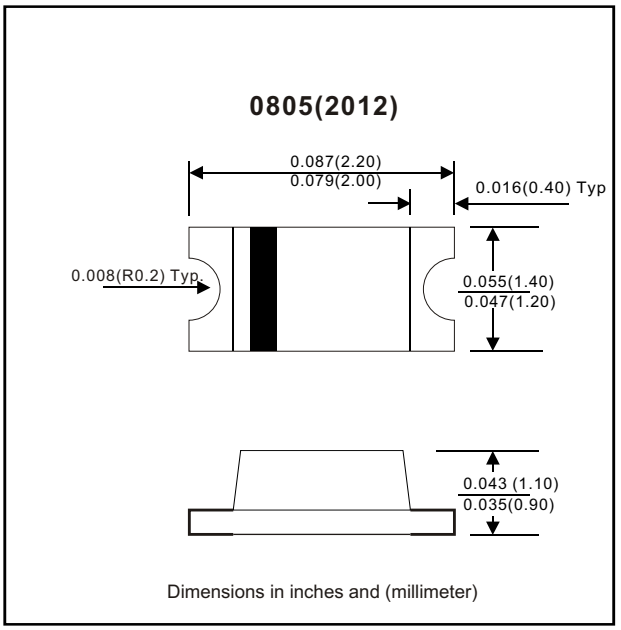
CDBS001A

Io = 100mA
V_R = 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 T_A = 25 °C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Repetitive peak reverse voltage		V_{RRM}, V_R			30	V
Average forward current		Io			100	mA
Forward current , surge peak	8.3 ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}		1000		mA
Capacitance between terminals	F=1MHz and 10 V DC reverse voltage	C_T			6	pF
Power Dissipation		P_D			300	mW
Storage temperature		T_{STG}	-40		+125	°C
Junction temperature		T j	-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_F			0.24	V
Forward voltage 2	IF = 1 mA DC	V_F			0.32	V
Forward voltage 3	IF = 10 mA DC	V_F			0.40	V
Forward voltage 4	IF = 30 mA DC	V_F			0.50	V
Forward voltage 5	IF = 100 mA DC	V_F			1.00	V
Reverse current	V_R = 25 V	I_R			2	uA

RATING AND CHARACTERISTIC CURVES (CDBS001A)

Fig. 1 - Forward characteristics

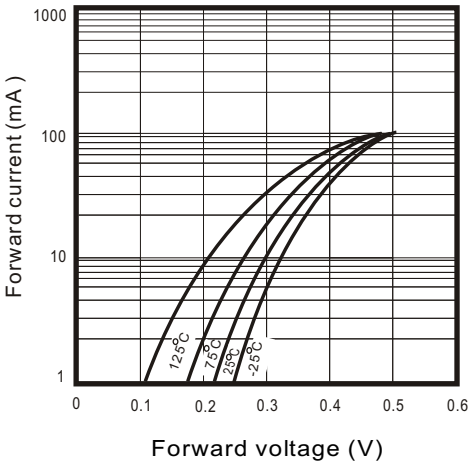


Fig. 2 - Reverse characteristics

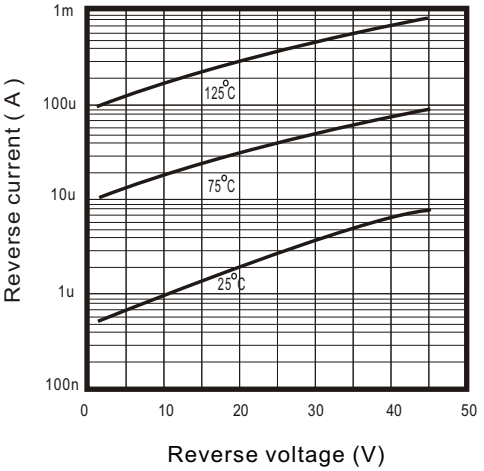


Fig. 3 - Capacitance between terminals characteristics

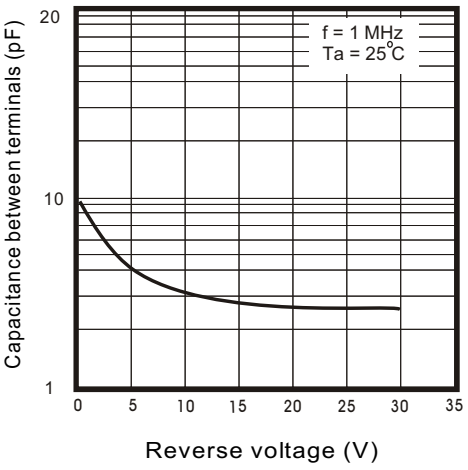


Fig. 4 - Current derating curve