SMD Schottky Barrier Diode

COMCHIP
SMD Diodes Specialist

CDBF001A

Io = 100mA
V_R = 30 Volts

Features

Designed for mounting on small surface.

Extremely thin/leadless package.

Low drop-down voltage.

Majority carrier conduction.

Mechanical data

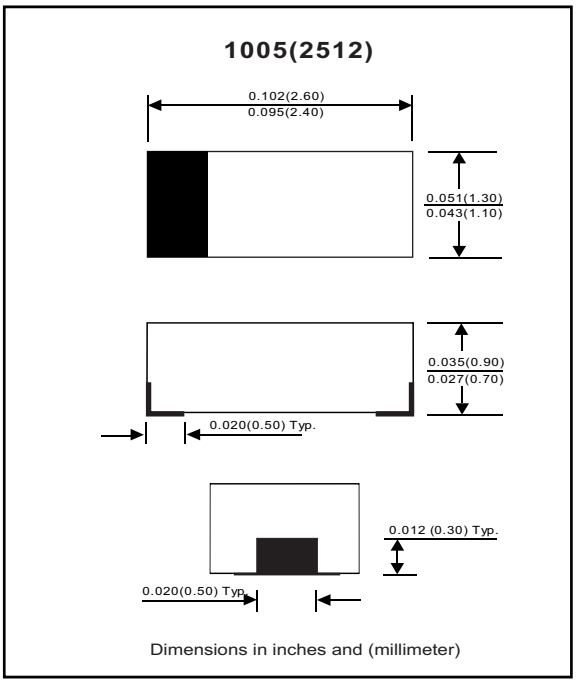
Case: 1005 (2512) Standard package , molded plastic.

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

Polarity: Indicated by cathode band.

Mounting position: Any.

Weight: 0.006 gram (approximately).



Dimensions in inches and (millimeter)

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		I_O			100	mA
Forward current , surge peak	8.3 ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}		500		mA
Power Dissipation		P_D			150	mW
Storage temperature		T_{STG}	-40		+125	°C
Junction temperature		Tj	-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
Capacitance between terminals	F=1MHz and 10 V DC reverse voltage	C_T			6	pF

RATING AND CHARACTERISTIC CURVES (CDBF001A)

Fig. 1 - Forward characteristics

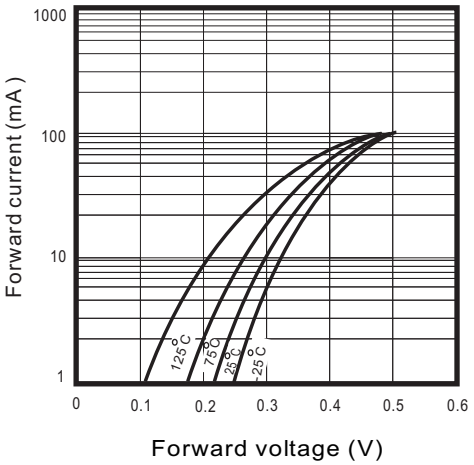


Fig. 2 - Reverse characteristics

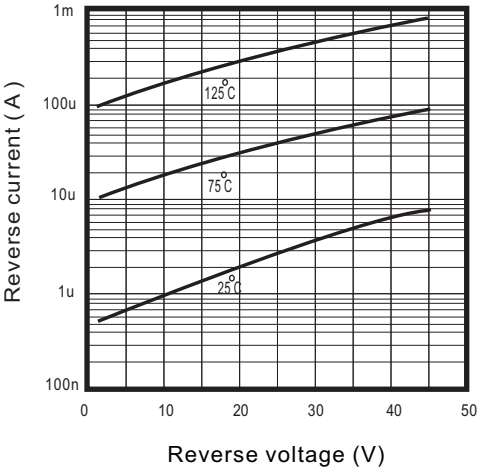


Fig. 3 - Capacitance between terminals characteristics

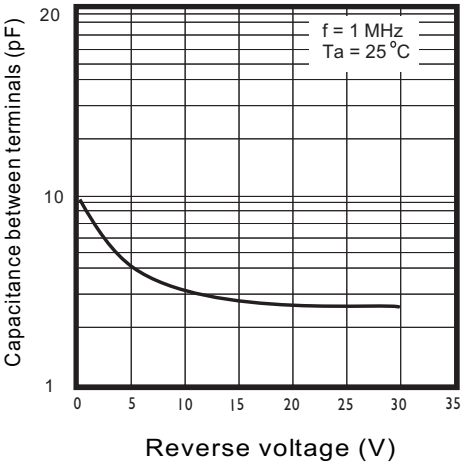


Fig. 4 - Current derating curve