

SMD Schottky Barrier Diode

CDBF0520 (Lead-free Device)

$I_o = 500 \text{ mA}$

$V_R = 20 \text{ Volts}$

Features

Low forward Voltage

Designed for mounting on small surface.

Extremely thin/leadless package.

Majority carrier conduction.



Mechanical data

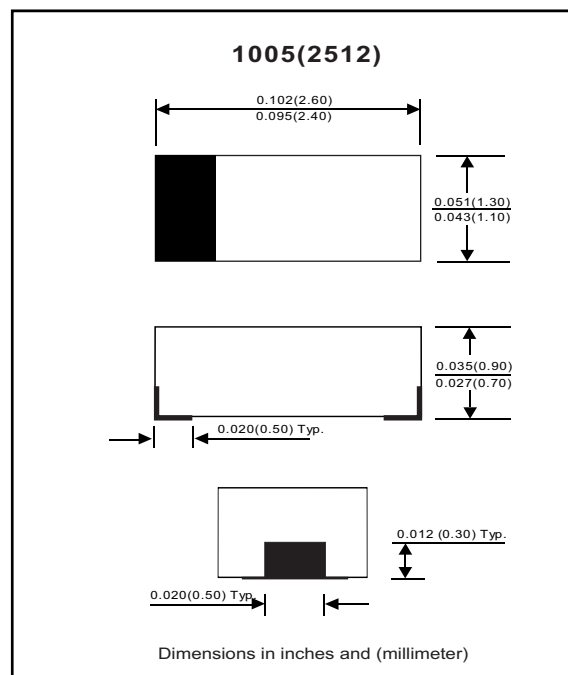
Case: SOD-323F (2512) Standard package , molded plastic.

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

Polarity: Indicated by cathode band.

Mounting position: Any.

Weight: 0.006 gram (approximately).



Maximum Rating (at $T_A = 25^\circ \text{C}$ unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Peak reverse voltage		V_{RM}			30	V
Reverse voltage		V_R			20	V
Average forward rectified current		I_o			0.5	A
Forward current ,surge peak	8.3 ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}			2	A
Storage temperature		T_{STG}	-40		+125	$^\circ\text{C}$
Junction temperature		T_j	-40		+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	$I_F = 100\text{mA}$ $I_F = 500\text{mA}$	V_F V_F			0.36 0.47	V V
Reverse current	$V_R = 20\text{V}$	I_R			100	μA
Capacitance between terminals	$f = 1\text{MHz}$, and 0 VDC reverse voltage	C_T		100		pF

RATING AND CHARACTERISTIC CURVES (CDBF0520)

Fig. 1 - Forward characteristics

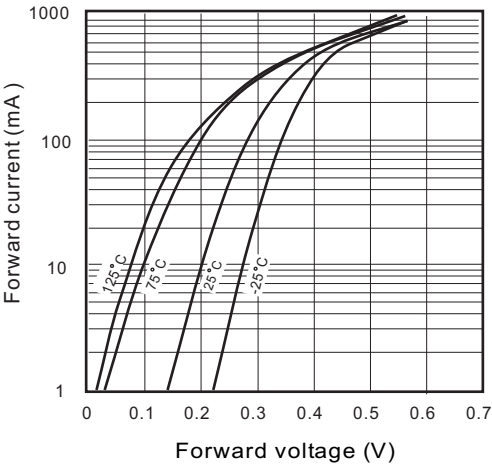


Fig. 2 - Reverse characteristics

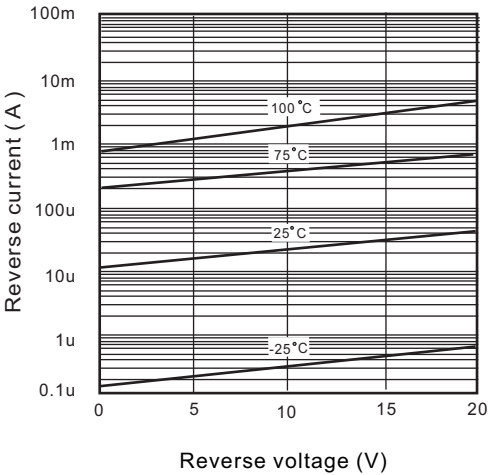


Fig. 3 - Capacitance between terminals characteristics

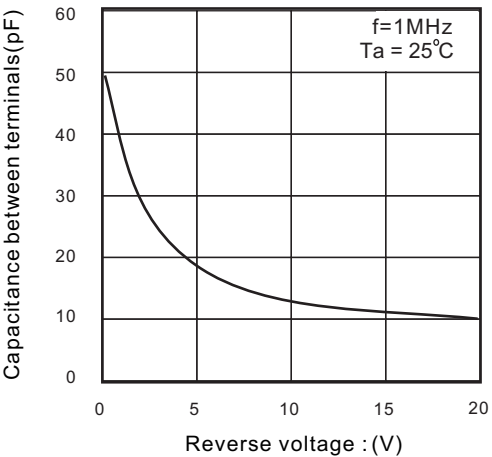


Fig. 4 - Current derating curve

