SMD Schottky Barrier Diode

COMCHIP
SMD Diodes Specialist

CDBF0520 (Lead-free Device)

Io = 500 mA
V_R = 20 Volts

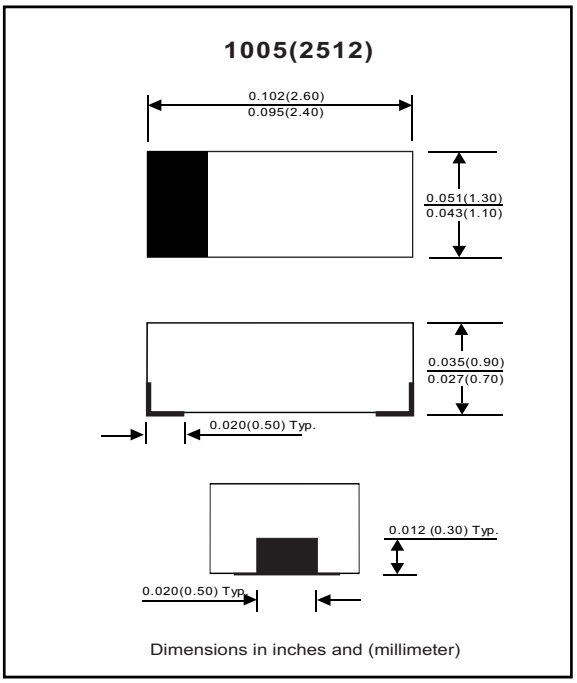
Features

Low forward Voltage

Designed for mounting on small surface.

Extremely thin/leadless package.

Majority carrier conduction.



Dimensions in inches and (millimeter)

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°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		Io			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	°C
Junction temperature		Tj	-40		+125	°C

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

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	I_F = 100mA I_F = 500mA	V_F V_F			0.36 0.47	V V
Reverse current	V_R = 20V	I_R			100	uA
Capacitance between terminals	f = 1MHz, and 0 VDC reverse voltage	C_T		100		pF

RATING AND CHARACTERISTIC CURVES (CDBF0520)

Fig. 1 - Forward characteristics

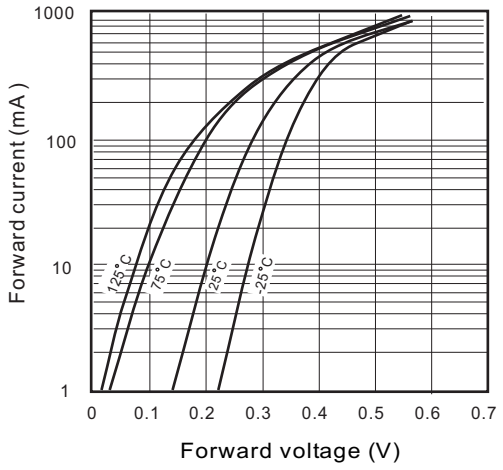


Fig. 2 - Reverse characteristics

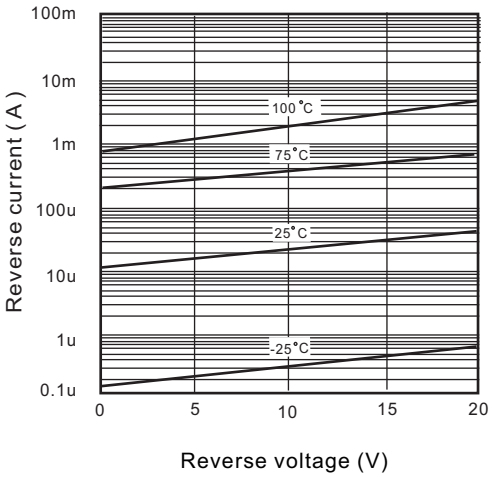


Fig. 3 - Capacitance between terminals characteristics

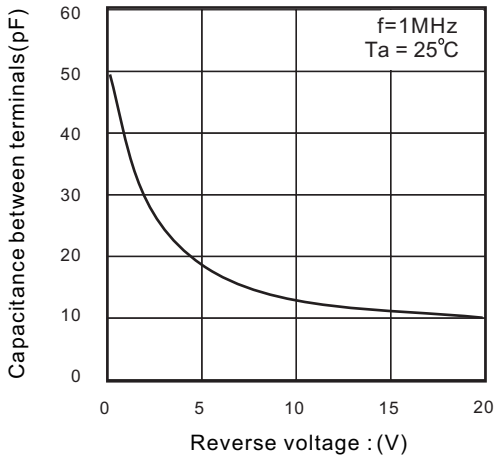


Fig. 4 - Current derating curve