SMD Schottky Barrier Diode

COMCHIP
SMD Diodes Specialist

CDBF0520L (Lead-free Device)

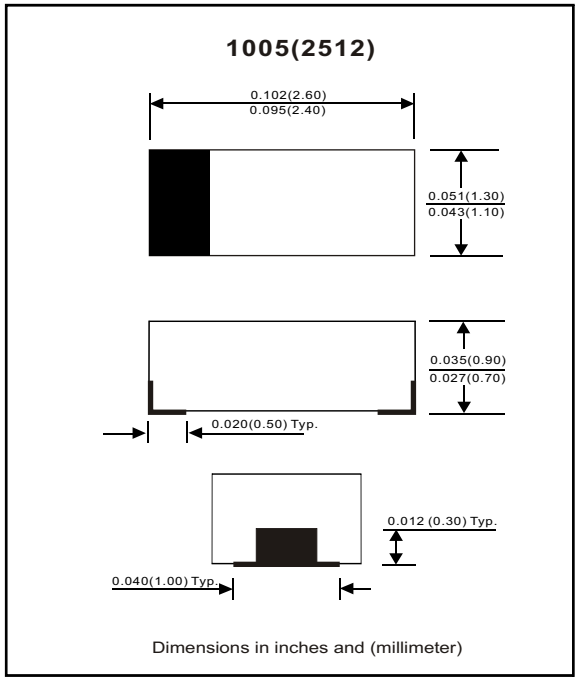
I_O = 500 mA
V_R = 20 Volts

Features

- Low forward voltage.
- Designed for mounting on small surface.
- Extremely thin / leadless package.
- 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(approx.).



Maximum Rating (at T_A=25°C unless otherwise noted)

Parameter	Conditions	Symbol	Min	Typ	Max	Unit
Peak reverse voltage		V_{RM}			20	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}			5.5	A
Storage temperature		T_{STG}	-40		+125	°C
Junction temperature		T_j	-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 @Ta = 25 °C I_F = 500mA @Ta = 25 °C I_F = 100mA @Ta = 100 °C I_F = 500mA @Ta = 100 °C	V_F			300 385 220 330	mV
Reverse current	V_R = 10V @Ta = 25 °C V_R = 20V @Ta = 25 °C	I_R			75 250	uA
Capacitance between terminals	f = 1 MHz, and 0 VDC reverse voltage	C_T			170	pF
Reverse recovery time	I_F = I_R = 10mA, Irr x I_R, R_L = 100ohm	Trr		22		ns

RATING AND CHARACTERISTIC CURVES (CDBF0520L)

Fig. 1 - Forward characteristics

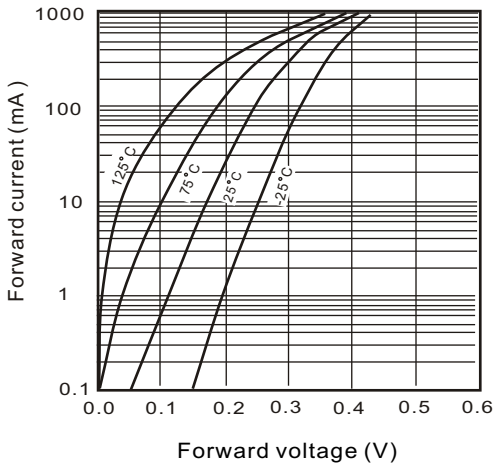


Fig. 2 - Reverse characteristics

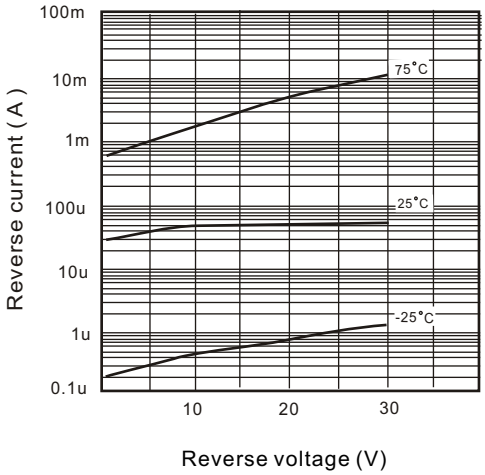


Fig. 3 - Capacitance between terminals characteristics

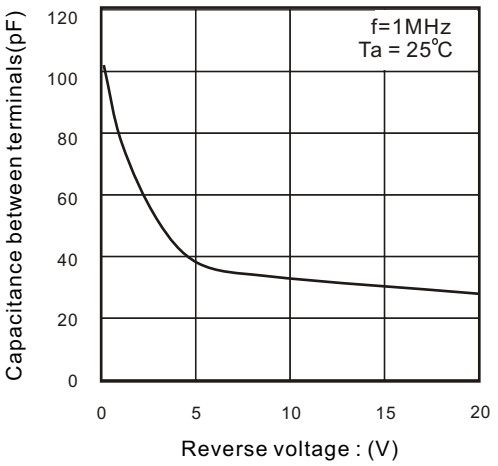


Fig. 4 - Current derating curve