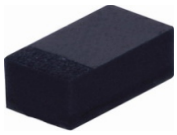
SMD Schottky Barrier Diode

COMCHIP
SMD Diodes Specialist

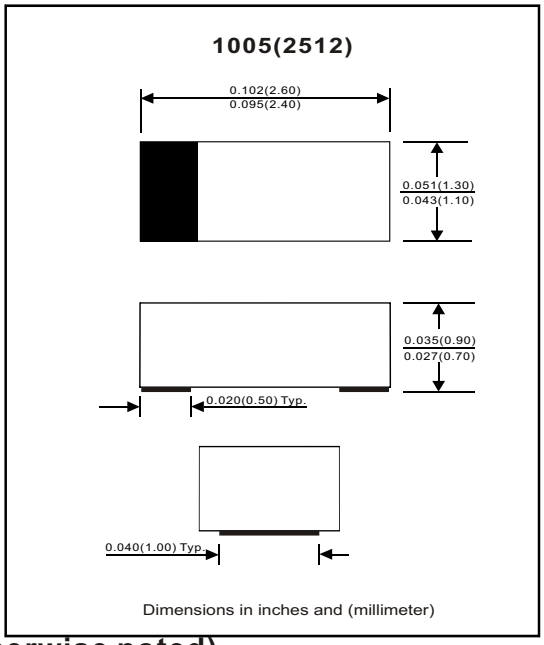
CDBFR42/43 (RoHs Device)

Io = 200 mA
V_R = 30 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}			30	V
Reverse voltage		V_R			30	V
RMS reverse voltage		$V_{R(RMS)}$			21	V
Average forward rectified current		I_O			200	mA
Repetitive peak forward current		I_{FRM}			0.5	A
Forward current,surge peak	8.3 ms single half sine-wave superimposed on rate load(JEDEC method)	I_{FSM}			4	A
Power Dissipation		P_D			200	mW
Thermal resistance junction to ambient air		$R_{\theta JA}$			500	°C/W
Storage temperature		T_{STG}	-55		+125	°C
Junction temperature		T_j			+125	°C

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

Parameter		Conditions	Symbol	Min	Typ	Max	Unit
Forward voltage	CDBFR42/43	I_F = 200mA	V_F			1	V
	CDBFR42	I_F = 10mA				0.4	
	CDBFR42	I_F = 50mA				0.65	
	CDBFR43	I_F = 2mA				0.33	
	CDBFR43	I_F = 15mA				0.45	
Reverse current		V_R = 25V	I_R			0.5	uA
Capacitance between terminals		f = 1 MHz, and 1 VDC reverse voltage	C_T			10	pF
Reverse recovery time		I_F=I_R=10mA,Irr=0.1xI_R,RL=100 ohm	T_{rr}			5	nS

RATING AND CHARACTERISTIC CURVES (CDBFR42/43)

Fig. 1 - Forward characteristics

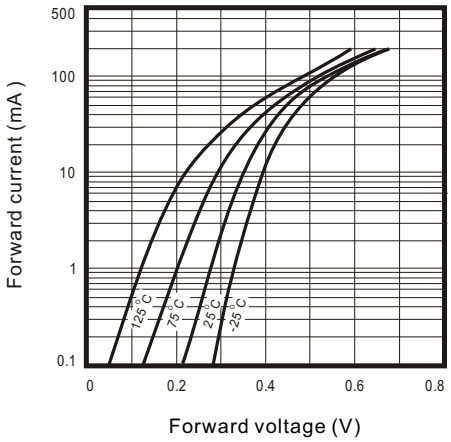


Fig. 2 - Reverse characteristics

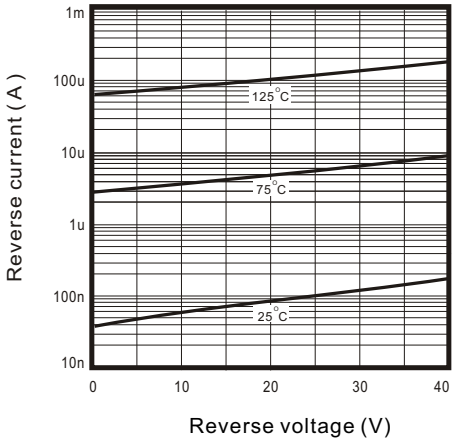


Fig.3 - Capacitance between terminals characteristics

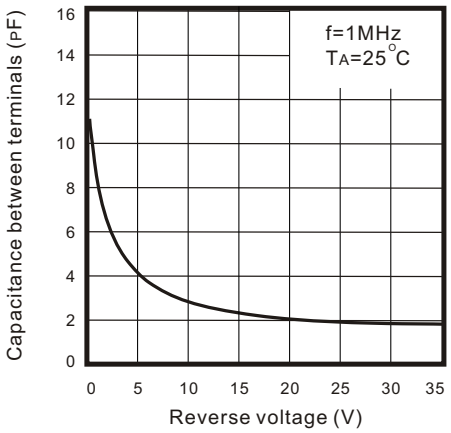


Fig.4 - Current derating curve