

CDBW0520 - CDBW0540

Voltage: 20- 40 Volts

Current: 0.5 Amp



Feature

Low turn-on voltage

Fast switching

PN junction guard ring for transient and ESD protection

Mechanical data

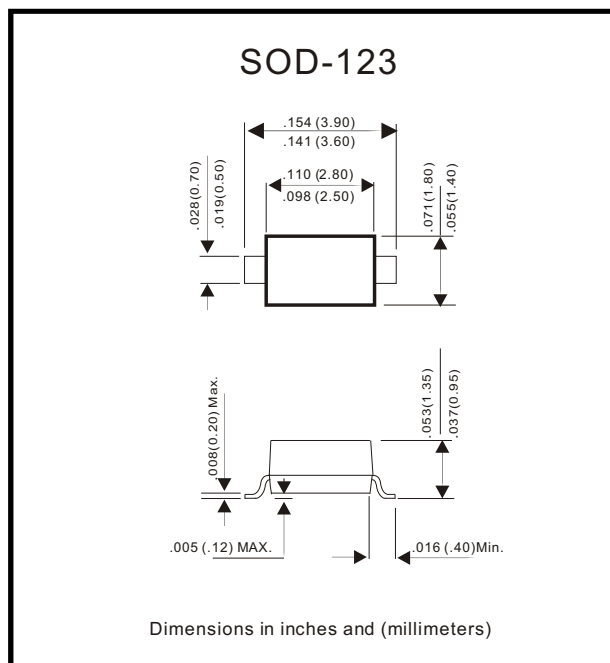
Case: SOD-123, molded plastic

Terminals: solderable per MIL-STD-750, method 2026

Polarity: Indicated by cathode band

Mounting position: Any

Weight: 0.008 grams



Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CDBW0520	CDBW0530	CDBW0540	Unit
Max.RepetitivePeak Reverse Voltage	V_{RRM}	20	30	40	V
Max. DC Blocking Voltage	V_{DC}	14	21	28	V
Max. RMS Voltage	V_{RMS}	20	30	40	V
Peak Surge Forward Current 8.3ms single halfsine-wave Sine-wave superimposed on Rate load (JEDEC)	I_{FSM}	5.5			A
Max. AverageForward Current	I_o	0.5			A
Max. Forward Current at 0.1 A 0.5 A	V_F	0.3 0.385	0.375 0.430	0.51	V
Max. Reverse Current	I_R	0.075 @ $V_R=10V$ 0.25 @ $V_R=20V$	0.02 @ $V_R=15V$ 0.13 @ $V_R=30V$	0.01@ $V_R=20V$ 0.02 @ $V_R=40V$	mA
Max. Thermal Resistance	$R_{\theta JA}$ $R_{\theta JL}$	206 150			°C/W
Operating junction temperature	T_j	-55 to +125			°C
Storage temperature	T_{STG}	-55 to +125			°C

Note 1: Thermal resistance from junction to ambient and junction to to lead P.C.B. Mounted on 0.2 x 0.2 copper pad areas

RATING AND CHARACTERISTIC CURVES (CDBW0520-0540)

Fig. 1 - Reverse Characteristics

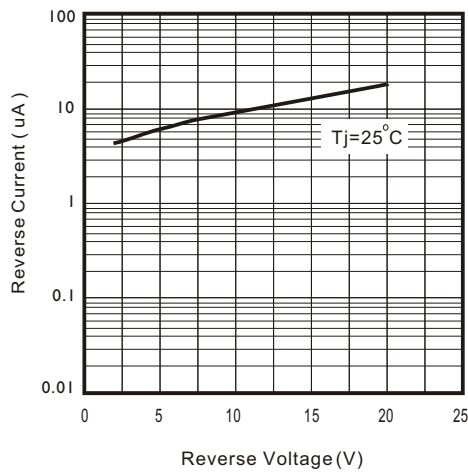


Fig. 2 - Reverse Characteristics

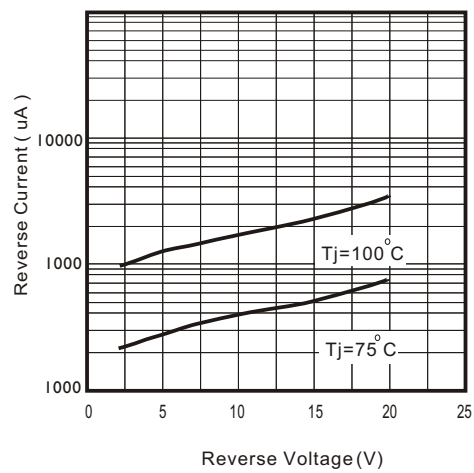


Fig. 3 - Forward Characteristics

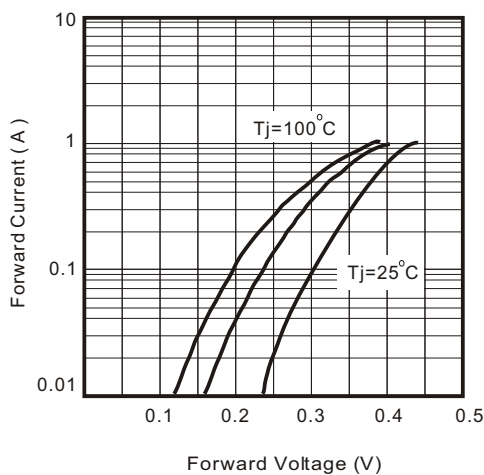


Fig. 4 - Current Derating Curve

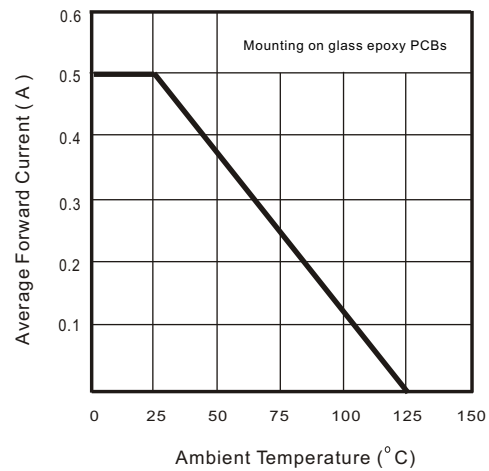


Fig. 3 - Capacitance Between Terminals characteristics

