

## CDBV0520 - CDBV0540

Voltage: 20- 40 Volts

Current: 0.5 Amp



### Features

Extremely Low Drop Down Voltage

Extremely Thin Package

Low Stored Charge

Majority Carrier Conduction

### Mechanical data

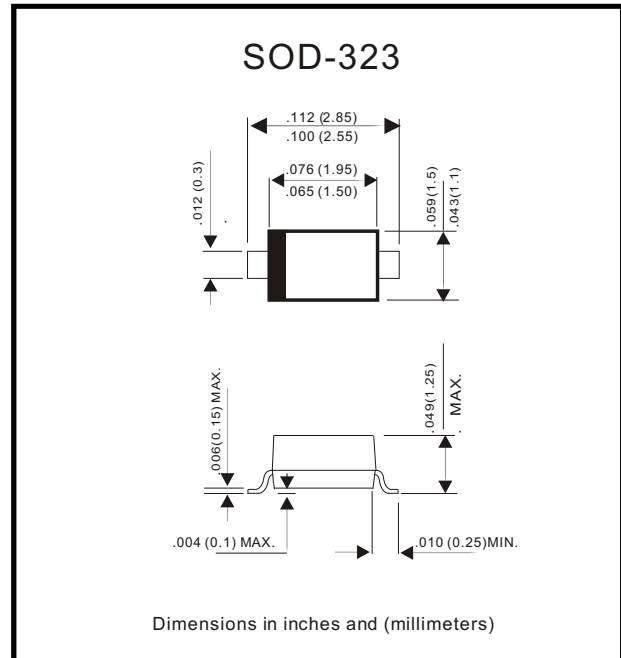
Case: SOD-323, molded plastic

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

Polarity: Indicated by cathode band

Mounting position: Any

Weight: 0.0045 grams



### Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CDBV 0520	CDBV 0530	CDBV 0540	Unit
Max. Repetitive Peak Reverse Voltage	V <sub>RRM</sub>	20	30	40	V
Max. DC Blocking Voltage	V <sub>DC</sub>	14	21	28	V
Max. RMS Voltage	V <sub>RMS</sub>	20	30	40	V
Peak Surge Forward Current 8.3ms single half sine-wave Sine-wave superimposed on Rate load (JEDEC)	I <sub>FSM</sub>	2.0			A
Max. Average Forward Current	I <sub>O</sub>	0.5			A
Max. Forward Current at 0.1 A 0.5 A	V <sub>F</sub>	0.31 0.43	0.36 0.47	0.36 0.47	V
Max. Reverse Current	I <sub>R</sub>	0.10 @ V <sub>R</sub> =10V 0.25 @ V <sub>R</sub> =20V	0.03 @ V <sub>R</sub> =10V 0.13 @ V <sub>R</sub> =30V	0.03 @ V <sub>R</sub> =10V 0.13 @ V <sub>R</sub> =30V	mA
Max. Thermal Resistance	R <sub>θJA</sub>	426			°C/W
Operating junction temperature	T <sub>j</sub>	-40 to +125			°C
Storage temperature	T <sub>STG</sub>	-40 to +125			°C

Note 1: Thermal resistance from junction to ambient

## RATING AND CHARACTERISTIC CURVES (CDBV0520-0540)

Fig. 1 - Reverse Characteristics  
(CDBV0520)

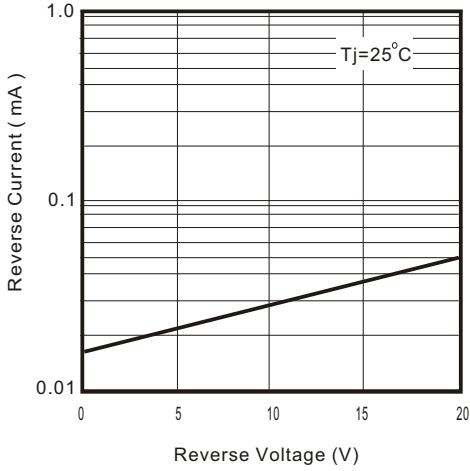


Fig. 1 - Reverse Characteristics  
(CDBV0530-0540)

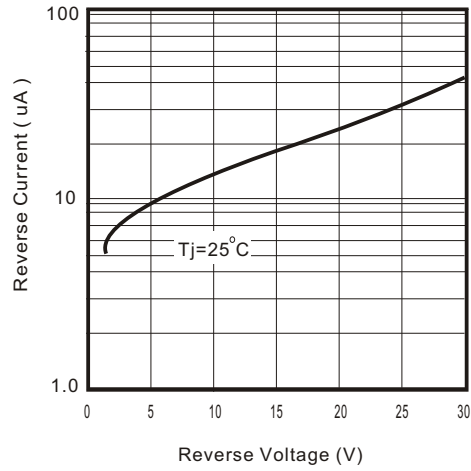


Fig. 3 - Forward Characteristics  
(CDBV0520)

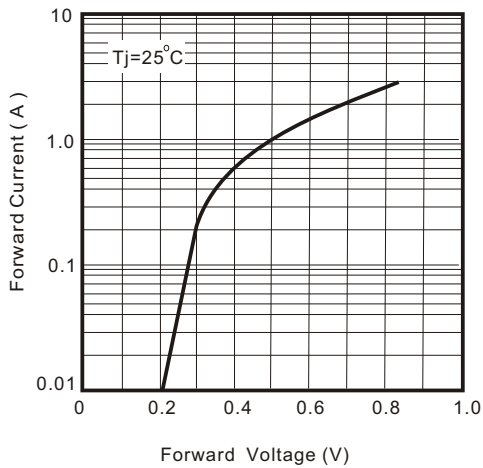


Fig. 4 - Forward Characteristics  
(CDBV0530-0540)

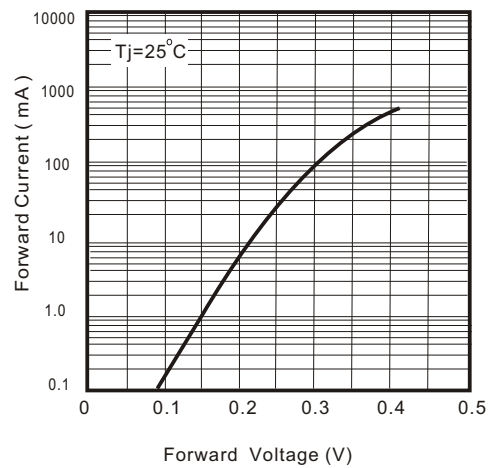


Fig. 5 - Capacitance Between  
Terminals characteristics

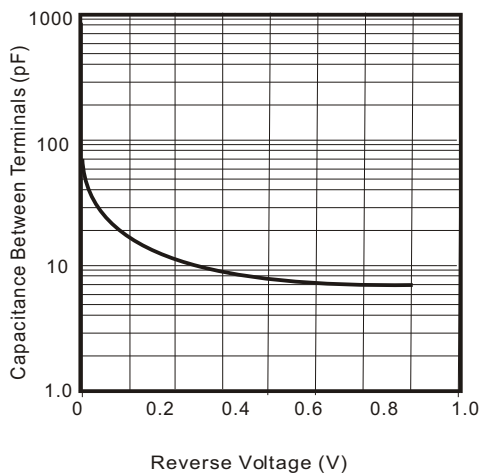


Fig. 6 - Current Derating Curve

