



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



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SMD Schottky Barrier Diode



SMD Diodes Specialist

CDBV120-G THRU. CDBV140-G

$I_o=1.0A$
 $V_R=20 \sim 40V$
 RoHS Device



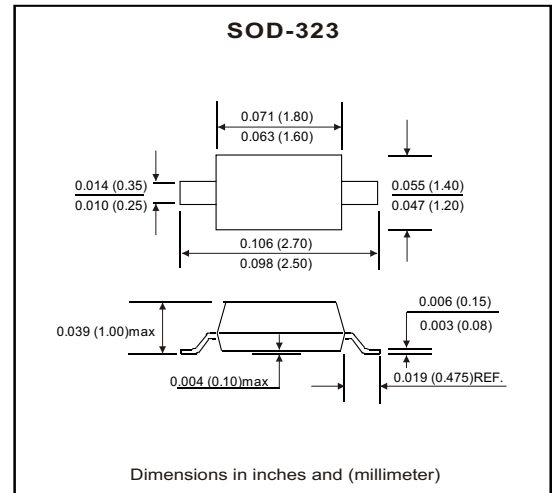
Features

- For use in low voltage, high frequency inverters.
- Free wheeling, and polarity protection applications.

Mechanical Data

- Case: Molded plastic SOD-323
- Terminals: Solderable per MIL-STD-750, Method 2026.1.
- Polarity: Indicated by cathode band.
- Mounting position: Any.
- Marking:

CDBV120-G : SJ
 CDBV130-G : SK
 CDBV140-G : SL



Maximum Ratings (at $T_A=25^\circ C$ unless otherwise specified)

Parameter	Symbol	CDBV120-G	CDBV130-G	CDBV140-G	Unit
Non-repetitive peak reverse voltage	V_{RM}	20	30	40	V
Peak repetitive peak reverse voltage Working peak reverse voltage DC blocking voltage	V_{RRM} V_{RWM} V_R	20	30	40	V
RMS reverse voltage	$V_{R(RMS)}$	14	21	28	V
Average rectified output current	I_o	1			A
Peak forward surge current @ $T_p=8.3mS$	I_{FSM}	25			A
Repetitive peak forward current	I_{FRM}	625			mA
Power dissipation	P_D	200			mW
Thermal resistance (junction to ambient)	$R_{\theta JA}$	625			$^\circ C/W$
Storage temperature	T_{STG}	-65~+150			$^\circ C$

Electrical Characteristics (at $T_A=25^\circ C$ unless otherwise specified)

Parameter	Conditions	Symbol	Min.	Max.	Unit
Reverse breakdown voltage	$I_R=1mA$ CDBV120-G CDBV130-G CDBV140-G	V_{BR}	20 30 40		V
Reverse leakage current	$V_R=20V$ $V_R=30V$ $V_R=40V$ CDBV120-G CDBV130-G CDBV140-G	I_R		1	mA
Forward voltage	$I_F=1.0A$ CDBV120-G CDBV130-G CDBV140-G	V_F		0.45 0.55 0.60	V
	$I_F=3.0A$ CDBV120-G CDBV130-G CDBV140-G	V_F		0.75 0.875 0.90	V
Diode Capacitance	$V_R=4V, f=1MHz$	C_D		120	pF

ELECTRICAL CHARACTERISTIC CURVES (CDBV120-G thru. CDBV140-G)

Fig.1 Forward Current Derating Curve

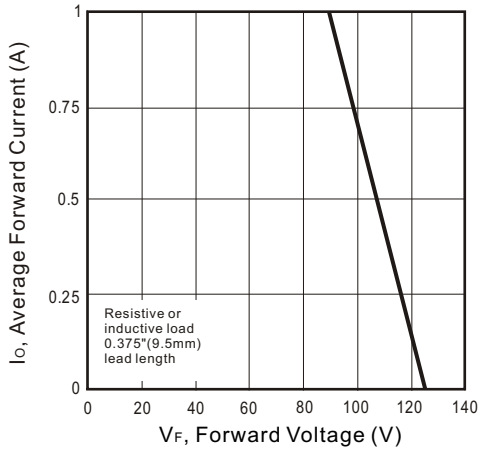


Fig.2 Maximum Non-repetitive Peak Forward Surge Current

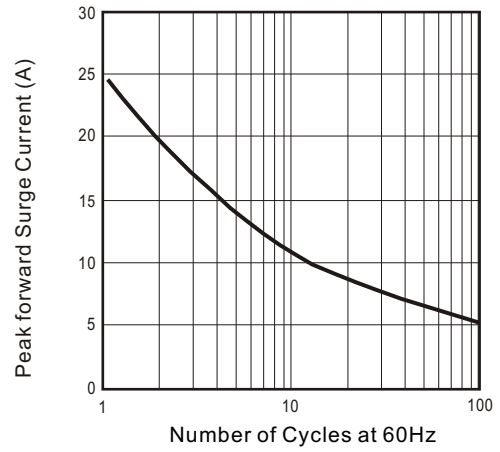


Fig.3 Typical Instantaneous Forward Characteristics

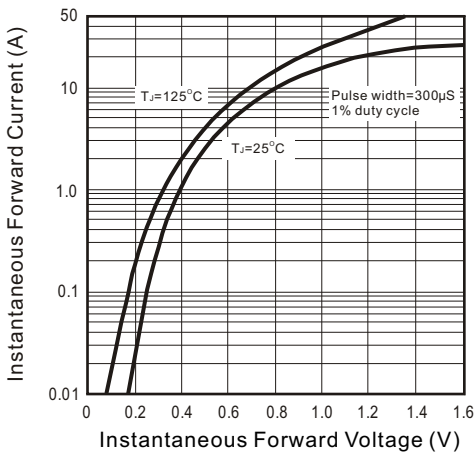


Fig.4 Typical Reverse Characteristics

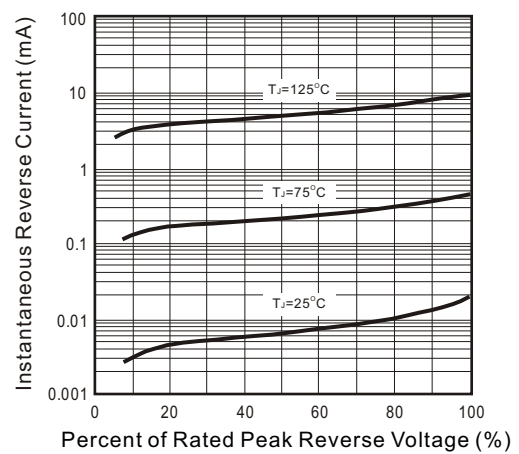


Fig.5 Typical Junction Capacitance

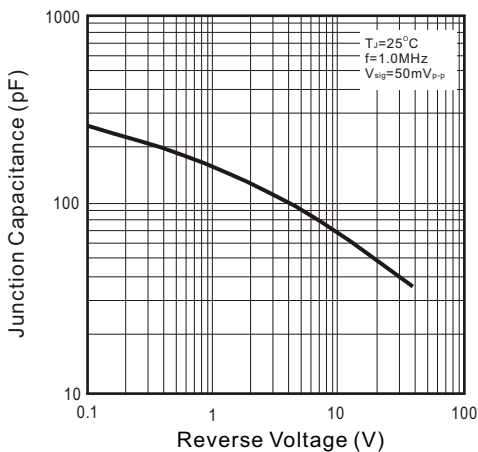


Fig.6 Typical Transient Thermal Impedance

