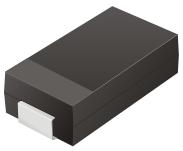
Low V_F SMD Schottky Barrier Rectifiers

COMCHIP
SMD Diodes Specialist

CDBA120L-G Thru. CDBA140SL-G

Reverse Voltage: 20 to 40 Volts
Forward Current: 1.0 Amp
RoHS Device



Features

-Ideal for surface mount applications.

-Easy pick and place.

-Plastic package has Underwriters Lab. flammability classification 94V-0.

-Built in strain relief.

-Super low forward voltage drop.

Mechanical data

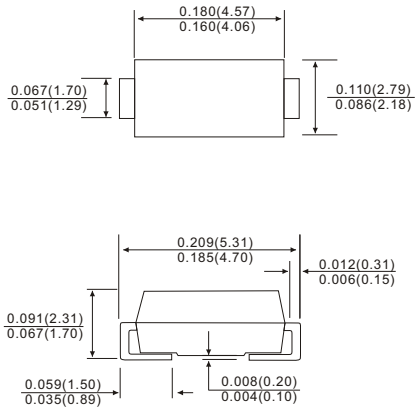
-Case: JEDEC DO-214AC, molded plastic.

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

-Polarity: Color band denotes cathode end.

-Approx. weight: 0.063 grams

DO-214AC (SMA)



Dimensions in inches and (millimeter)

Maximum Ratings and Electrical Characteristics

Single phase half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbol	CDBA 120L-G	CDBA 120LL-G	CDBA 140L-G	CDBA 140LL-G	CDBA 140SL-G	Units
Max. repetitive peak reverse voltage	V_{RRM}	20	20	40	40	40	V
Max. DC blocking voltage	V_{DC}	20	20	40	40	40	V
Max. RMS voltage	V_{RMS}	14	14	28	28	28	V
Peak surge forward current, 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	35					A
Max. average forward current	I_O	1.0					A
Max. instantaneous forward voltage at 1.0A	V_F	0.38	0.31	0.40	0.34	0.31	V
Max. DC reverse current at T_A=25°C rated DC blocking voltage T_A=80°C	I_R	1.0 40					mA
Max. thermal resistance (Note 1)	$R_{\theta JA}$ $R_{\theta JL}$	88 20					°C/W
Max. operating junction temperature	T_J	125					°C
Storage temperature	T_{STG}	-55 to +125					°C

Notes: 1. Thermal resistance from junction to ambient and junction to lead, P.C.B. mounted on 0.2×0.2 inch^2 copper pad area.

RATING AND CHARACTERISTIC CURVES (CDBA120L-G thru CDBA140SL-G)

Fig.1 Reverse Characteristics

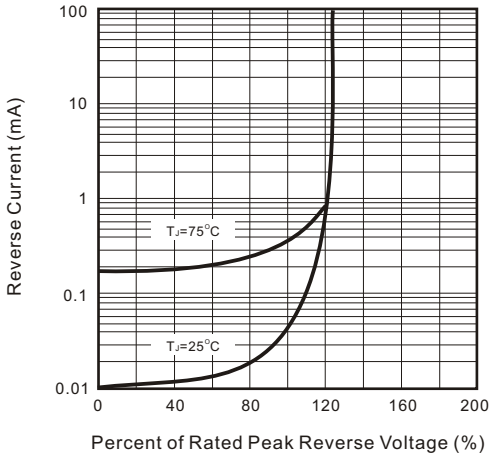


Fig.2 Forward Characteristics

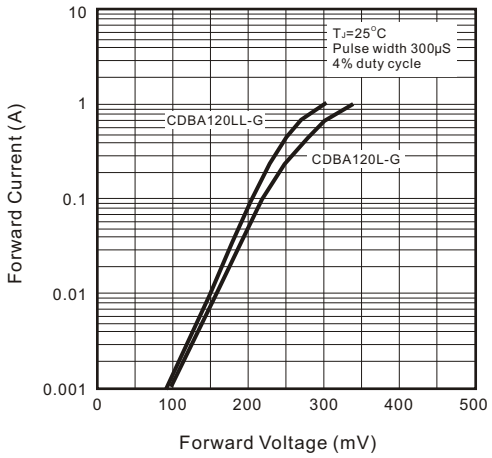


Fig.3 Junction Capacitance

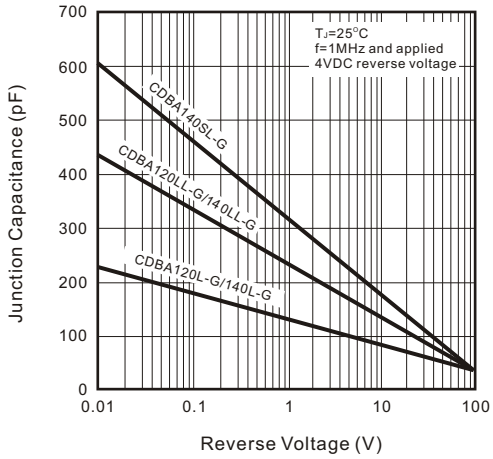


Fig.4 Forward Characteristics

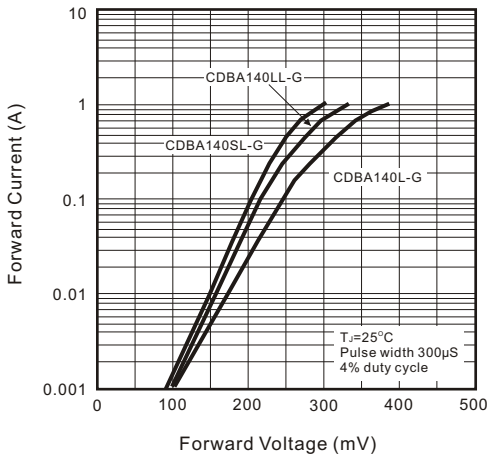


Fig.5 Non-repetitive Forward Surge Current

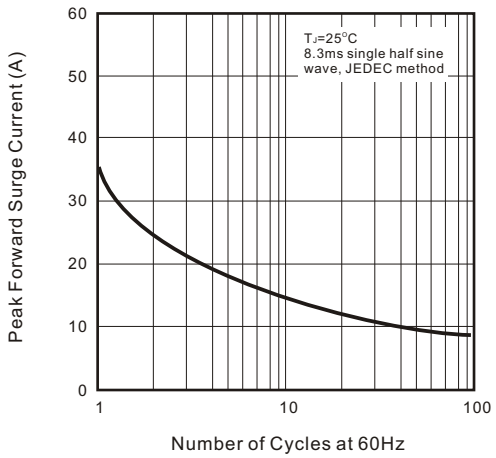


Fig.6 Current Derating Curve