

# Low VF 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**

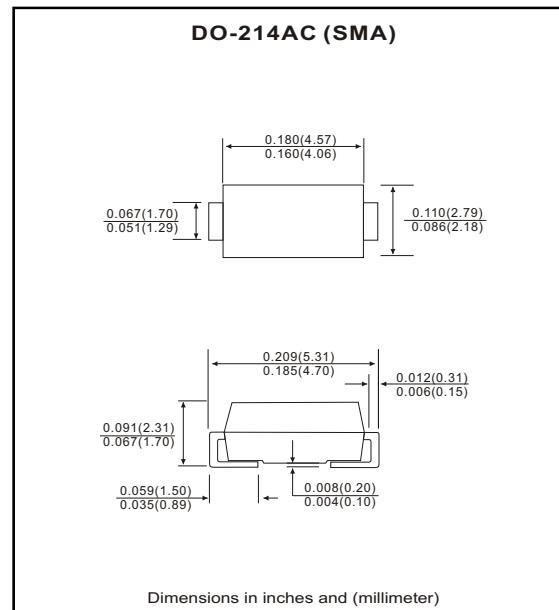


### Features

- 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



### 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 <sub>RRM</sub>	20	20	40	40	40	V
Max. DC blocking voltage	V <sub>DC</sub>	20	20	40	40	40	V
Max. RMS voltage	V <sub>RMS</sub>	14	14	28	28	28	V
Peak surge forward current, 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I <sub>FSM</sub>			35			A
Max. average forward current	I <sub>o</sub>			1.0			A
Max. instantaneous forward voltage at 1.0A	V <sub>F</sub>	0.38	0.31	0.40	0.34	0.31	V
Max. DC reverse current at T <sub>A</sub> =25°C rated DC blocking voltage T <sub>A</sub> =80°C	I <sub>R</sub>			1.0 40			mA
Max. thermal resistance (Note 1)	R <sub>θJA</sub> R <sub>θJL</sub>			88 20			°C/W
Max. operating junction temperature	T <sub>J</sub>			125			°C
Storage temperature	T <sub>STG</sub>			-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<sup>2</sup> copper pad area.

REV.A

QW-BL003

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

Fig.1 Reverse Characteristics

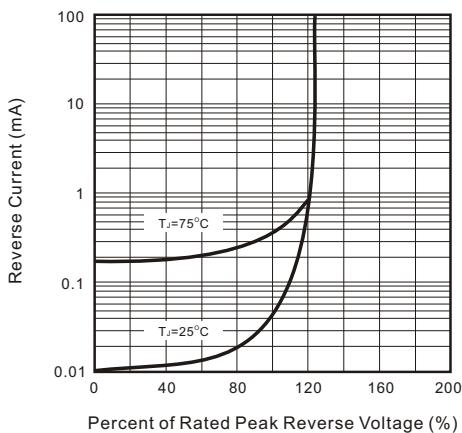


Fig.2 Forward Characteristics

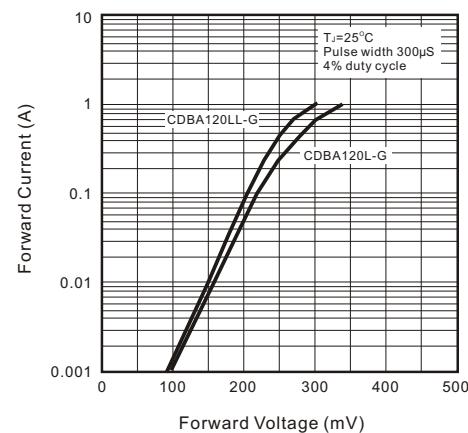


Fig.3 Junction Capacitance

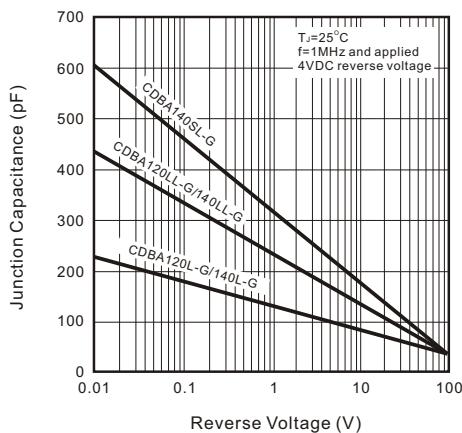


Fig.4 Forward Characteristics

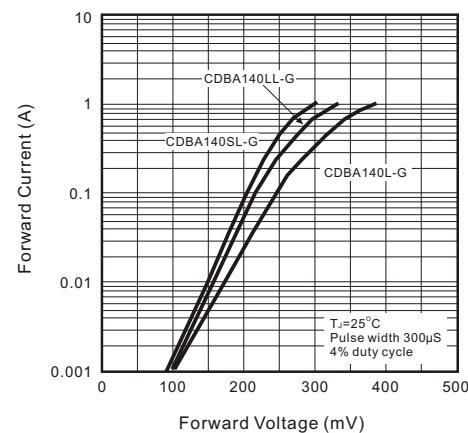


Fig.5 Non-repetitive Forward Surge Current

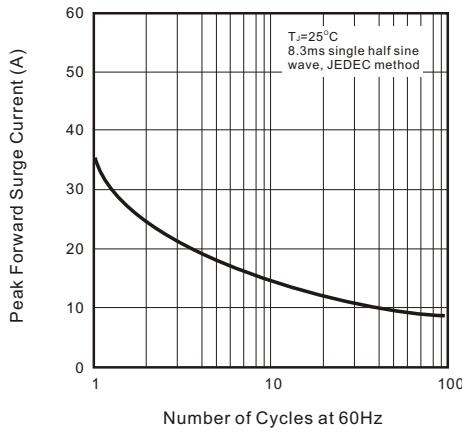


Fig.6 Current Derating Curve

