



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!



Contact us

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China

CDBB540-G Thru. CDBB5100-G

Reverse Voltage: 40 to 100 Volts

Forward Current: 5.0 Amp

RoHS Device



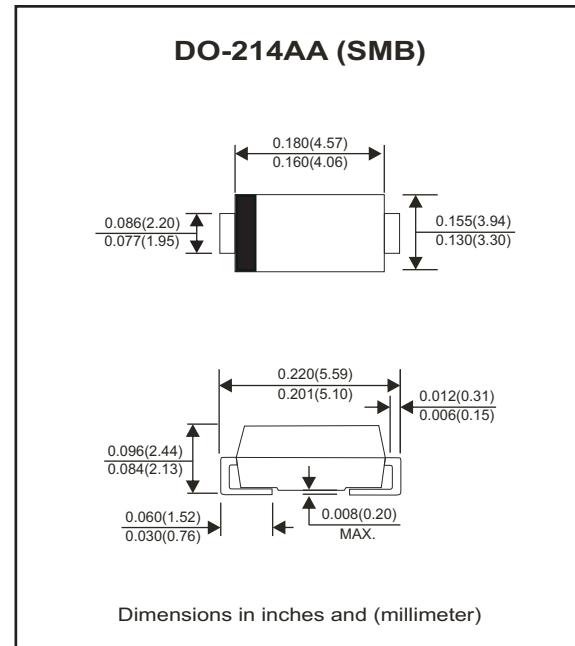
Features

- Ideal for surface mount applications.
- Ideal for automated placement.
- Guard ring for over voltage protection.
- Low forward voltage drop.

Mechanical data

- Case: DO-214AA(SMB), Molded plastic.
- Case material: Molded plastic. UL flammability classification rating 94V-0
- Terminals: Lead Free plating(Tin finish). Solderable per MIL-STD-202, method 208.
- Polarity: Cathode Band.
- Weight: 0.095 grams(approx).

Circuit diagram



Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CDBB540-G	CDBB560-G	CDBB5100-G	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	40	60	100	V
Maximum DC blocking voltage	V _{DC}	40	60	100	V
Maximum RMS voltage	V _{RMS}	28	42	70	V
Maximum average forward rectified current	I _F		5.0		A
Peak surge forward current, 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I _{FSM}		100		A
Maximum instantaneous forward voltage I _F =5.0A @ 25°C	V _F	0.55	0.70	0.85	V
Maximum DC reverse current @T _c =25°C at rated DC blocking voltage @T _c =100°C	I _R	0.5 10		0.2 5.0	mA
Typical junction capacitance (Note1)	C _J	300	210	170	pF
Typical thermal resistance (Note2)	R _{θJA} R _{θJL}		80 50		°C/W
Operating temperature range	T _J	-55 to +125		-55 to +150	°C
Storage temperature range	T _{STG}	-55 to +150			°C

Notes: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

2. Device mounted on FR-R substrate, 1"**1", 2oz, single-side,PC boards with 0.1"**0.15" copper pad.

SMD Schottky Barrier Rectifiers

Comchip
SMD Diode Specialist

RATING AND CHARACTERISTIC CURVES (CDBB540-G Thru. CDBB5100-G)

Fig.1 - Typical Forward Current Derating Curve

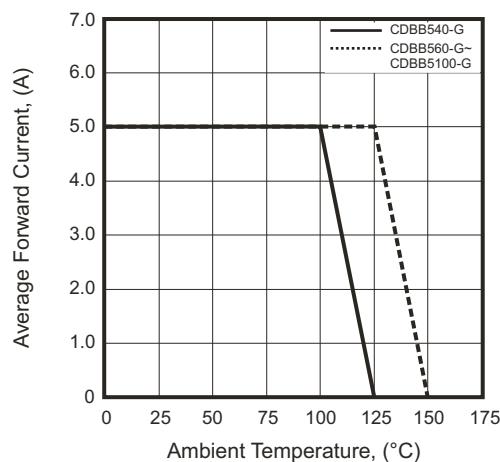


Fig.2 - Typical Forward Characteristics

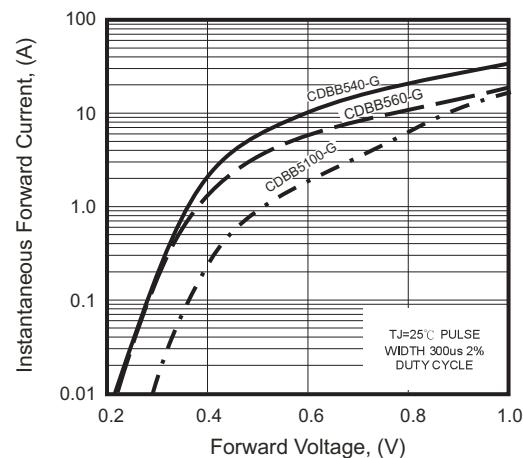


Fig.3 - Maximum Non-Repetitive Forward Surge Current

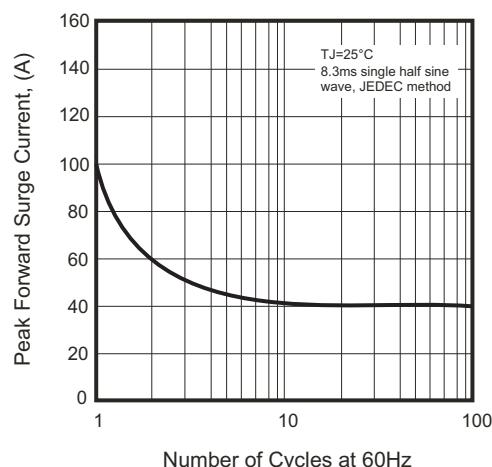


Fig.4 - Typical Reverse Characteristics

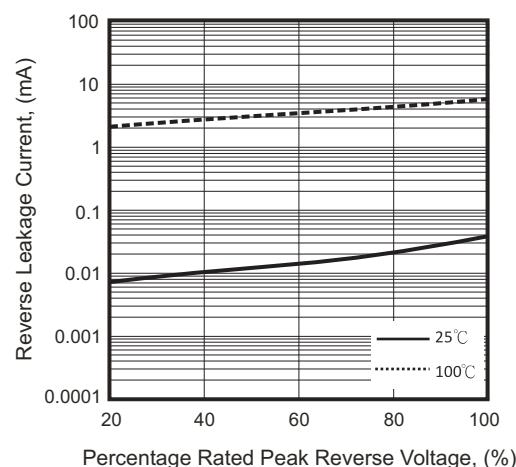
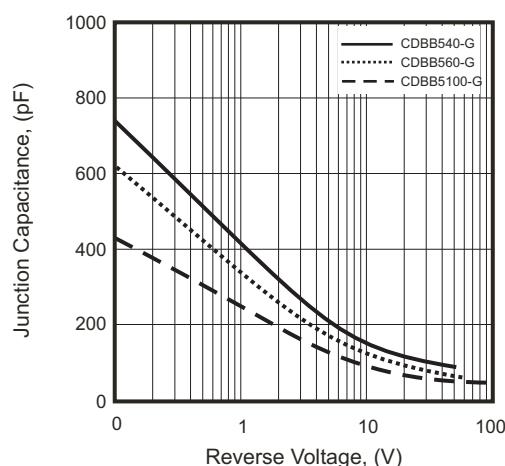
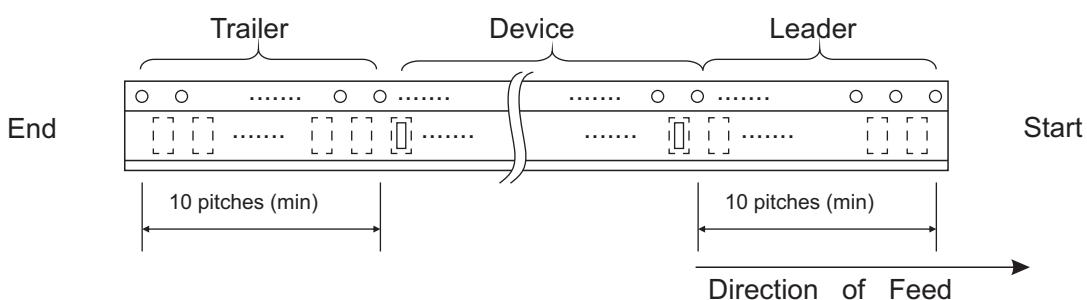
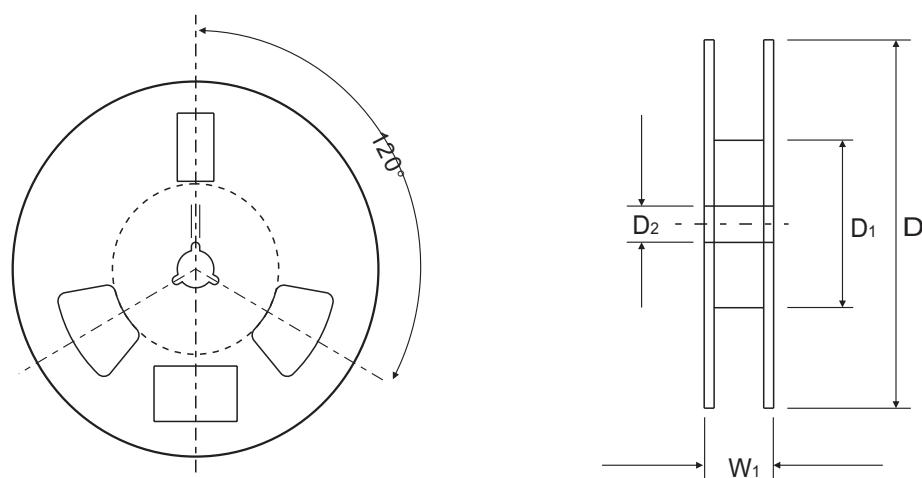
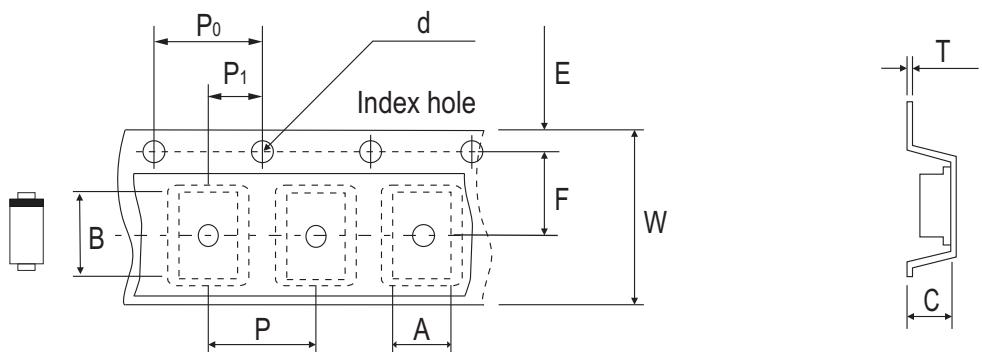


Fig.5 - Typical Junction Capacitance



Company reserves the right to improve product design, functions and reliability without notice.

Reel Taping Specification

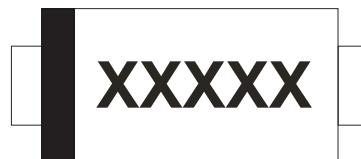


DO-214AA (SMB)	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	4.00 MAX.	5.90 MAX.	3.00 MAX.	1.50 ± 0.10	330 ± 2.00	50.0 MIN.	13.50 ± 1.0
	(inch)	0.157 MAX.	0.232 MAX.	0.118 MAX.	0.059 ± 0.004	12.99 ± 0.079	1.969 MIN.	0.531 ± 0.039

DO-214AA (SMB)	SYMBOL	E	F	P	P_0	P_1	T	W	W1
	(mm)	1.75 ± 0.10	5.50 ± 0.05	8.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.60 MAX	12.0 ± 0.30	18.4 MAX.
	(inch)	0.069 ± 0.004	0.217 ± 0.002	0.315 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.236 ± 0.004	0.472 ± 0.012	0.724 MAX

Marking Code

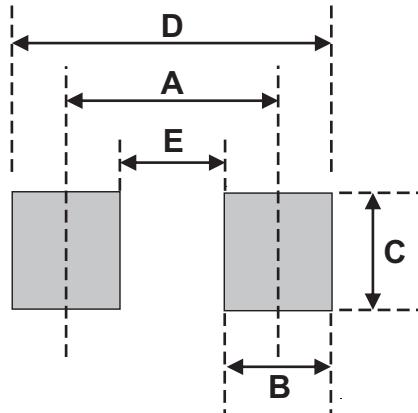
Part Number	Marking Code
CDBB540-G	SS54
CDBB560-G	SS56
CDBB5100-G	SS510



xxxx/xxxxx = Product type marking code

Suggested PAD Layout

SIZE	DO-214AA(SMB)	
	(mm)	(inch)
A	4.30	0.169
B	2.50	0.098
C	2.30	0.091
D	6.80	0.268
E	1.80	0.071



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
DO-214AA (SMB)	3,000	13