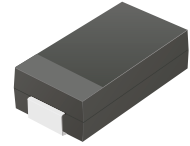


## CDBB220-G Thru. CDBB2100-G

Reverse Voltage: 20 to 100 Volts

Forward Current: 2.0 Amp

RoHS Device

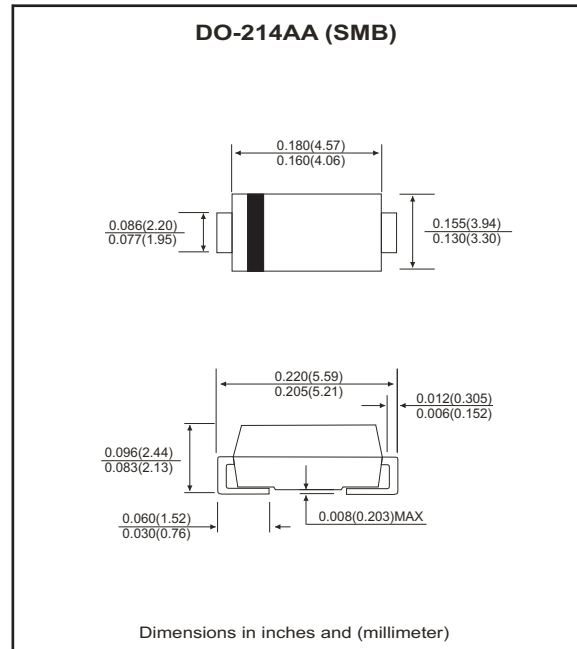


### Features

- Ideal for surface mount applications.
- Metal-semiconductor Junction with Guarding.
- Epitaxial construction.
- Very low forward voltage drop.
- High current capability.
- For use in low voltage, high frequency in venters, free wheeling, and polarity protection applications.
- Plastic package has Underwriters Lab. flammability classification 94V-0.
- High temperature soldering guaranteed: 250°C /10 seconds at terminals.

### Mechanical data

- Case: DO-214AA (SMB), molded plastic.
- Terminals: solderable per MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode end.
- Weight: 0.093 grams ( Approx.)



### Circuit Diagram



### Maximum Ratings and Electrical Characteristics

Ratings at Ta=25°C unless otherwise noted.  
Single phase, half wave, 60Hz, resistive or inductive loaded.  
For capacitive load, derate current by 20% .

Parameter	Symbol	CDBB 220-G	CDBB 240-G	CDBB 260-G	CDBB 280-G	CDBB 2100-G	Units
Max. repetitive peak reverse voltage	V <sub>RRM</sub>	20	40	60	80	100	V
Max. DC blocking voltage	V <sub>DC</sub>	20	40	60	80	100	V
Max. RMS voltage	V <sub>RMS</sub>	14	28	42	56	70	V
Peak surge forward current, 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I <sub>FSM</sub>	50					A
Max. average forward current	I <sub>(AV)</sub>	2.0					A
Max. instantaneous forward voltage at 2.0A DC	V <sub>F</sub>	0.55		0.75		0.85	V
Max. DC reverse current at rated DC blocking voltage (Note 1)	I <sub>R</sub>	0.5 15.0					mA
Typical. Junction Capacitance (Note 1)	C <sub>J</sub>	75					pF
Typical. Thermal resistance (Note 2)	R <sub>θJL</sub>	15					°C/W
Operating junction temperature	T <sub>J</sub>	-55 to +125					°C
Storage temperature	T <sub>STG</sub>	-65 to +150					°C

Notes: 1. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.  
2. Thermal resistance junction to lead.

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

REV:C

## RATING AND CHARACTERISTIC CURVES (CDBB220-G Thru CDBB2100-G)

Fig.1 - Forward Current Derating Curve

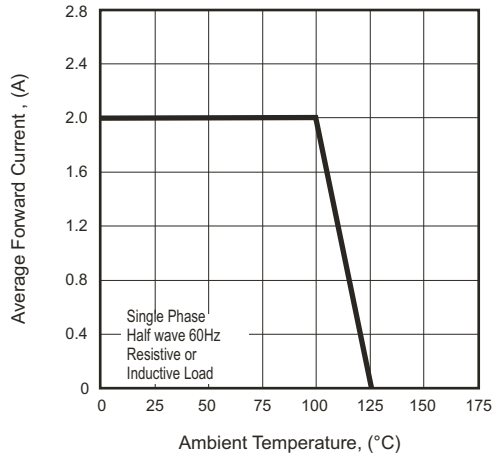


Fig.2 - Maximum Non-Repetitive Forward Surge Current

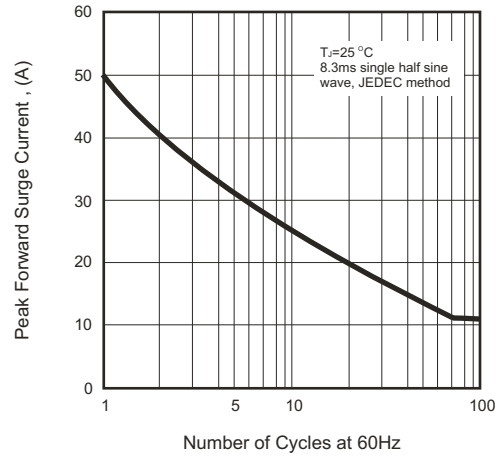


Fig.3 - Typical Instantaneous Forward Characteristics

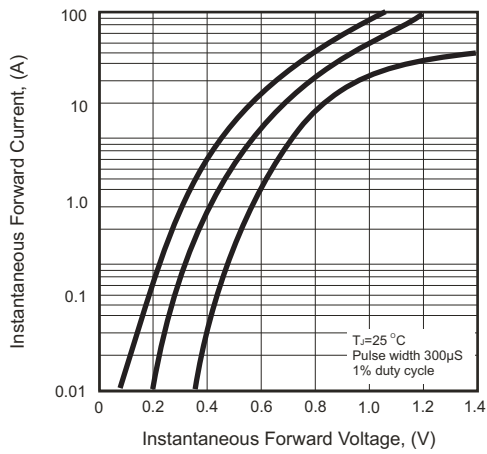


Fig.4 - Typical Junction Capacitance

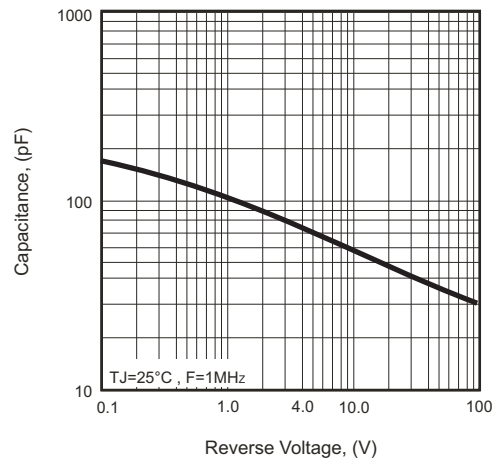
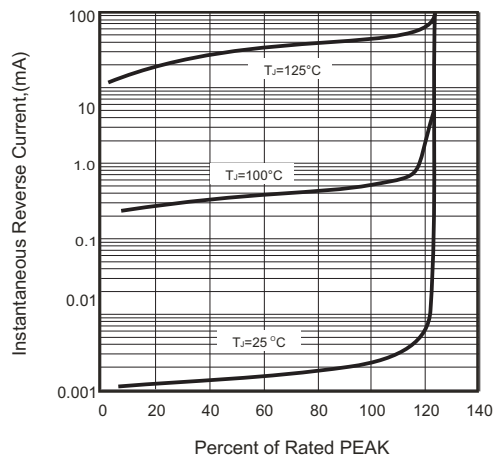
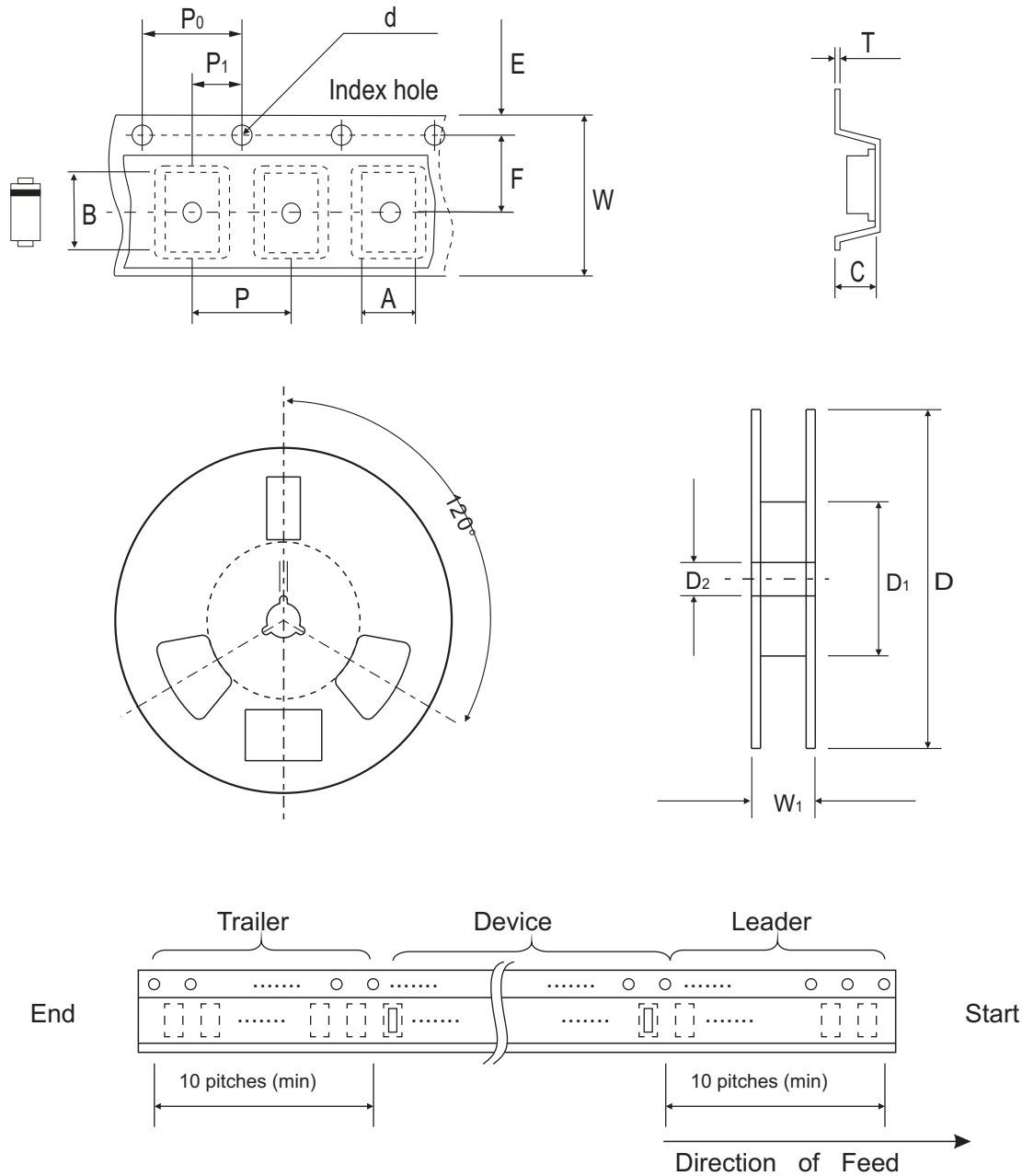


Fig.5 - Typical Reverse Characteristics



## 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 ± 0.10DIA	330 ± 2.00	50.0 MIN.	13.50 ± 1.0
	(inch)	0.157 MAX.	0.232 MAX.	0.118 MAX.	0.059 ± 0.004DIA	12.99 ± 0.079	1.969 MIN.	0.531 ± 0.039

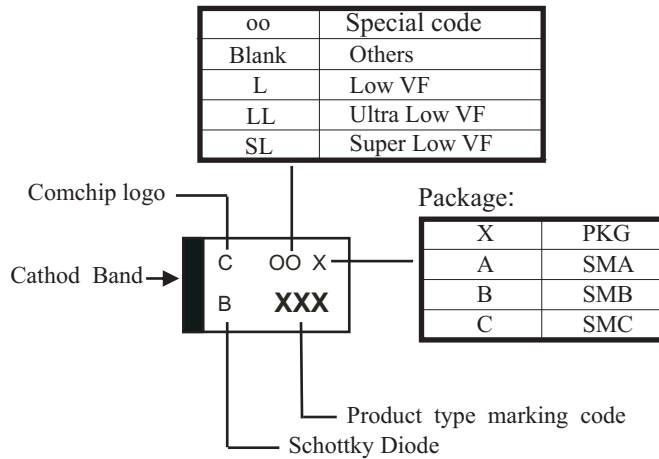
DO-214AA(SMB)	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	5.50 ± 0.05	8.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.60 MAX	12.0 ± 0.30	18.4 MAX.
	(inch)	0.0699 ± 0.004	0.217 ± 0.002	0.315 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.236 ± 0.004	0.472 ± 0.012	0.724 MAX

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REV:C

## Marking Code

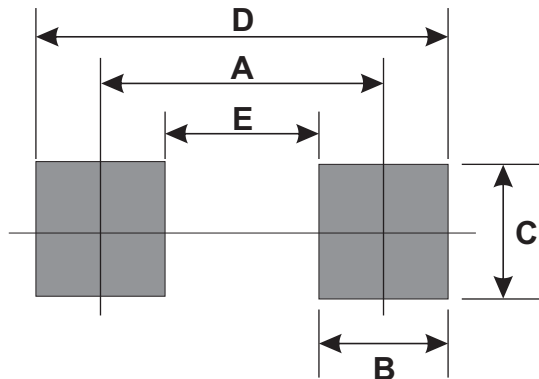
Part Number	Marking Code
CDBB220-G	220
CDBB240-G	240
CDBB260-G	260
CDBB280-G	280
CDBB2100-G	2100



xxx/xxxx = Product type marking code

## Suggested PAD Layout

SIZE	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