

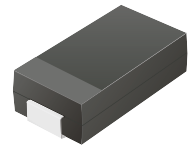
CDBB520-HF Thru. CDBB5100-HF

Reverse Voltage: 20 to 100 Volts

Forward Current: 5.0 Amp

RoHS Device

Halogen Free

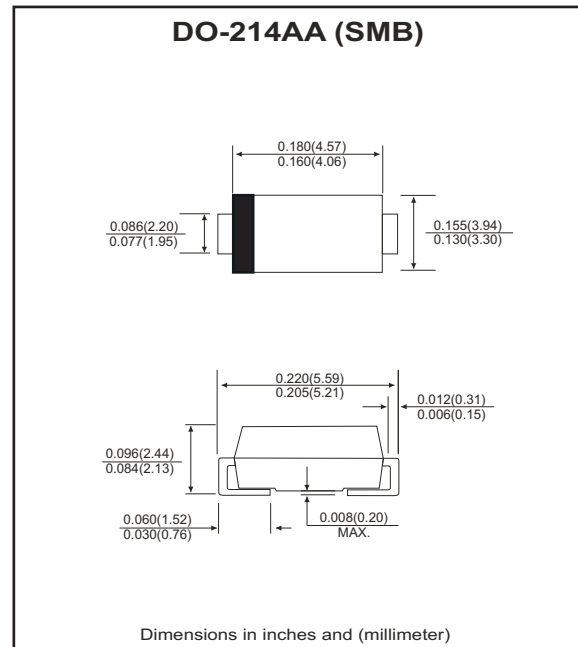


Features

- Ideal for surface mount applications.
- For use in low voltage, high frequency inverters.
- Epitaxial construction.
- Metal-semiconductor junction with guarding.
- High current capability.
- Low forward voltage drop.

Mechanical data

- Case: JEDEC DO-214AA, molded plastic.
- Terminals: Solderable per MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode end.
- Approx. weight: 0.093 grams



Maximum Ratings and Electrical Characteristics

Parameter	Symbol	CDBB 520-HF	CDBB 530-HF	CDBB 540-HF	CDBB 550-HF	CDBB 560-HF	CDBB 580-HF	CDBB 5100-HF	Units
Max. repetitive peak reverse voltage	V _{RRM}	20	30	40	50	60	80	100	V
Max. DC blocking voltage	V _{DC}	20	30	40	50	60	80	100	V
Max. RMS voltage	V _{RMS}	14	21	28	35	42	56	70	V
Peak surge forward current, 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I _{FSM}	175							A
Max. average forward rectified current at TL=90°C	I _(AV)	5.0							A
Max. instantaneous forward voltage at 5.0A DC @Tc=100°C	V _F	0.55			0.70				V
Max. DC reverse current at T _J =25°C rated DC blocking voltage T _J =100°C	I _R	0.5 20							mA
Max. operating junction temperature	C _J	300							pF
Max. thermal resistance	R _{θJA} R _{θJL}	50 10							°C/W
Max. operating junction temperature	T _J	-55 to +125							°C
Storage temperature	T _{STG}	-55 to +150							°C

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

RATING AND CHARACTERISTIC CURVES (CDBB520-HF thru CDBB5100-HF)

Fig.1 - Forward Current Derating Curve

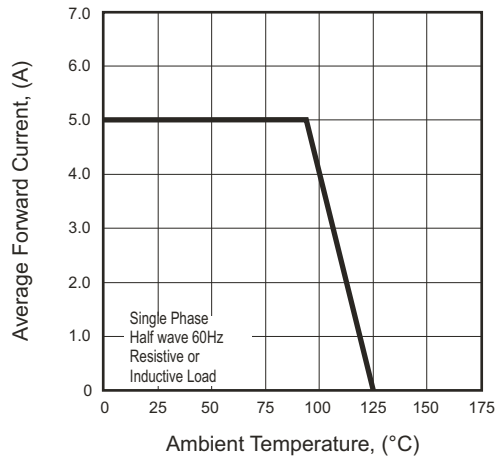


Fig.2 - Maximum Non-Repetitive Surge Current

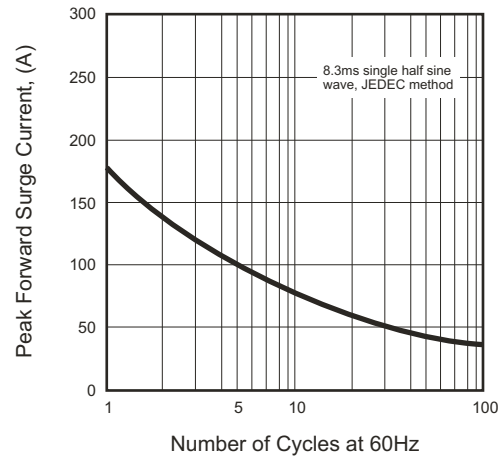


Fig.3 - Typical Instantaneous Forward Characteristics

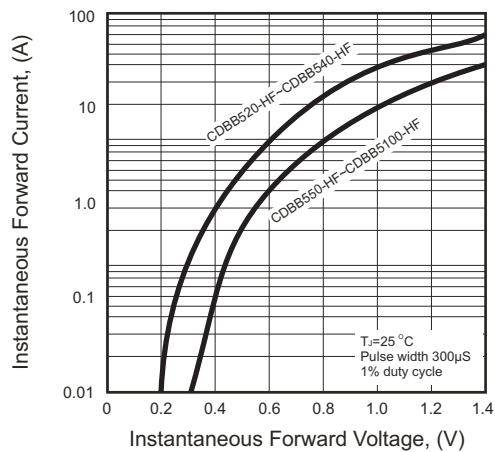


Fig.4 - Typical Junction Capacitance

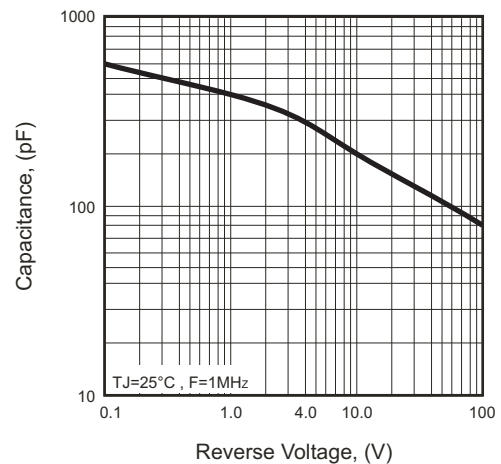
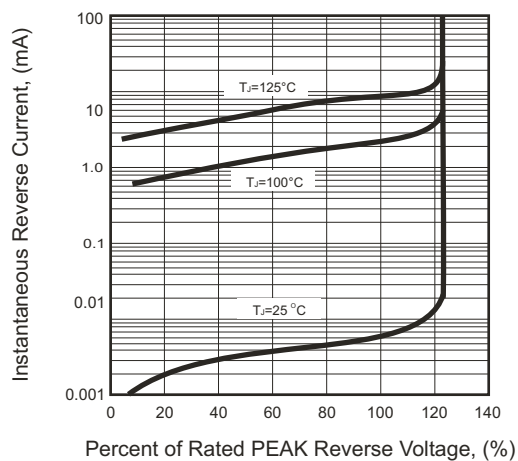
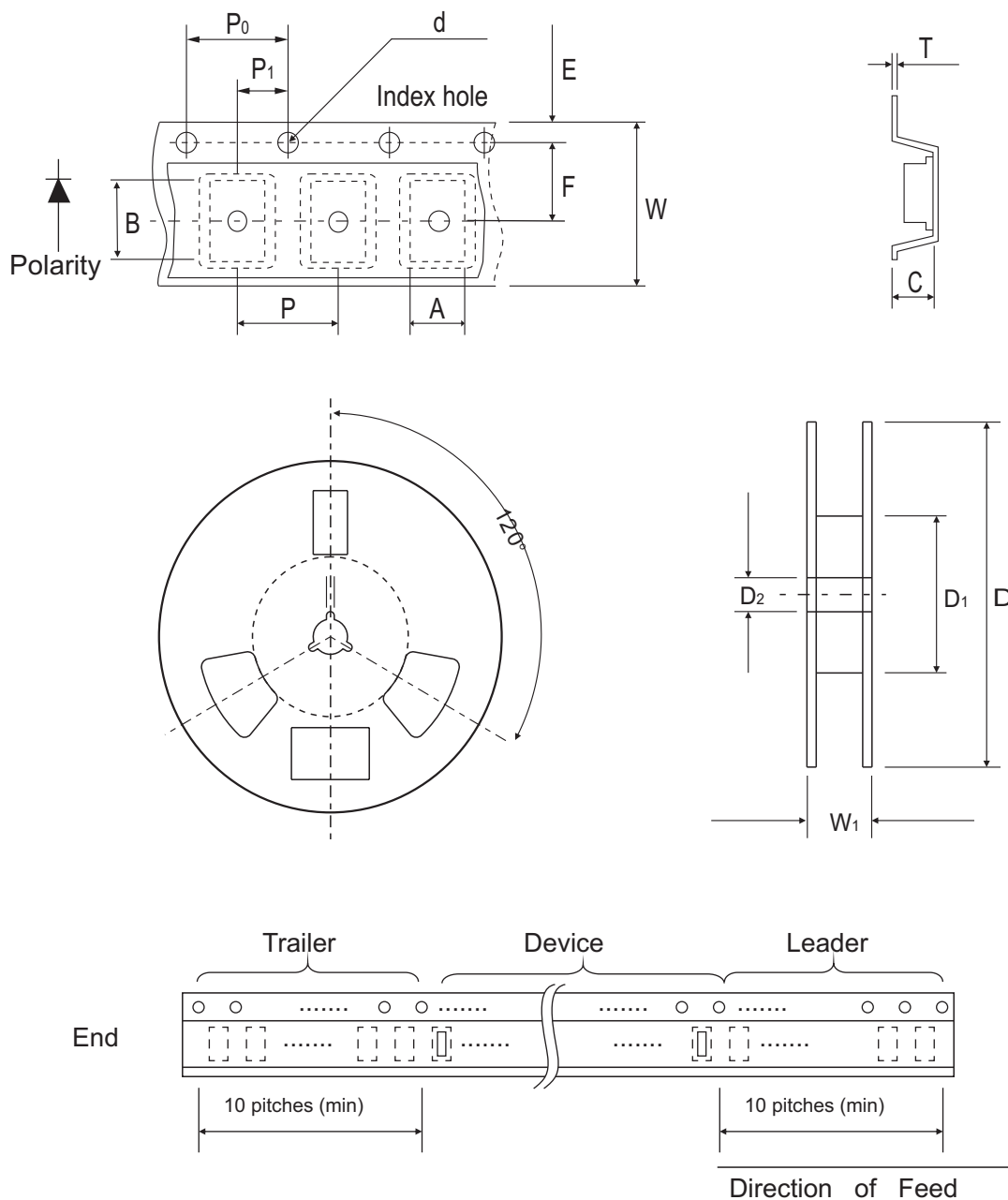


Fig.5 - Typical Reverse Characteristics



Reel Taping Specification



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

DO-214AA (SMB)	SYMBOL	E	F	P	P_0	P_1	T	W	W_1
	(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

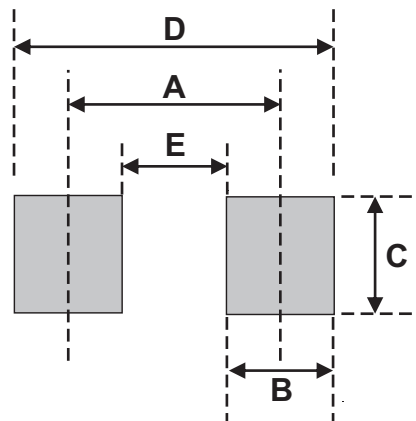
Part Number	Marking Code
CDBB520-HF	SS52
CDBB530-HF	SS53
CDBB540-HF	SS54
CDBB550-HF	SS55
CDBB560-HF	SS56
CDBB580-HF	SS58
CDBB5100-HF	SS510



xxxxxx = 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