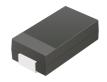


CDBA540-HF Thru. CDBA5200-HF

Reverse Voltage: 40 to 200 Volts

Forward Current: 5.0 Amp

RoHS Device Halogen Free



Features

- -Low Profile surface mount applications in order to optimize board space.
- -Low power loss, high efficiency.
- -High current capability, low forward voltage drop.
- -High surge capability.
- -Guard ring for overvoltage protection.
- -Ultra high-speed switching.
- -Silicon epitaxial planar chip, metal silicon junction.

Mechanical data

-Epoxy: UL94-V0 rate flame retardant.

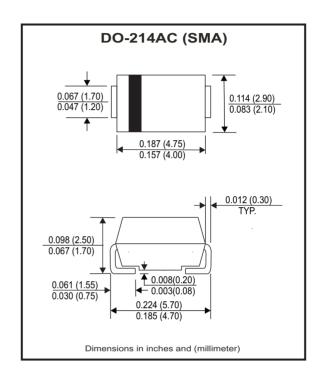
-Case: Molded plastic, DO-214AC / SMA

-Terminals: solderable per MIL-STD-750,

method 2026.

-Polarity: Indicated by cathode band.

-weight: 0.055 grams



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	CDBA 540-HF	CDBA 560-HF	CDBA 5100-HF	CDBA 5150-HF	CDBA 5200-HF	Units
Max. repetitive peak reverse voltage	VRRM	40	60	100	150	200	٧
Max. DC blocking voltage	VDC	40	60	100	150	200	V
Max. RMS voltage	VRMS	28	42	70	105	140	V
Max. instantaneous forward voltage @ 5.0A, T _A =25°C	VF	0.55	0.75	0.81	0.87	0.90	V
Operating Temperature	TJ		-50 to +150		-50 to	+175	°C

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	Units
Forward rectified current	see Fig.1	lo			5.0	А
Forward surge current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)		Ігѕм			125	Α
Reverse Current	Vr =Vrrm Ta=25°C	lR			0.5	mA
Reverse Current	Vr =Vrrm Ta=100°C	lR			20	mA
Thermal Resistance	Junction to ambient	Reja		24		°C/W
Diode Junction capacitance	f=1MHz and applied 4V DC reverse Voltage	Сл		380		pF
Storage temperature		Тѕтс	-50		+175	°C

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

SMD Schottky Barrier Rectifiers



RATING AND CHARACTERISTIC CURVES (CDBA540-HF thru. CDBA5200-HF)

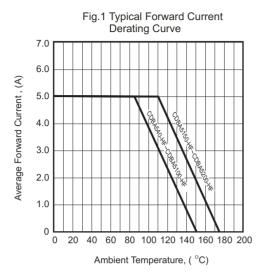


Fig.3- Maximum Non-repetitive Forward Surge Current

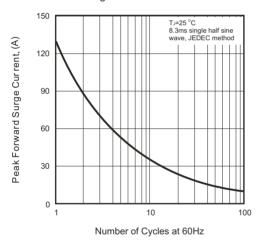


Fig.5- Typical Reverse Characteristics

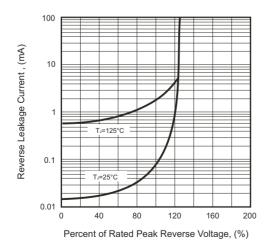


Fig.2- Typical Forward Characteristics

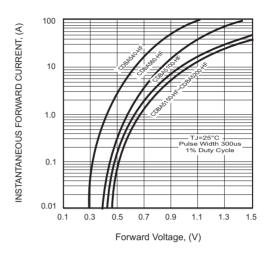
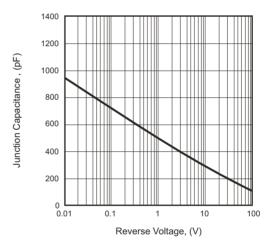


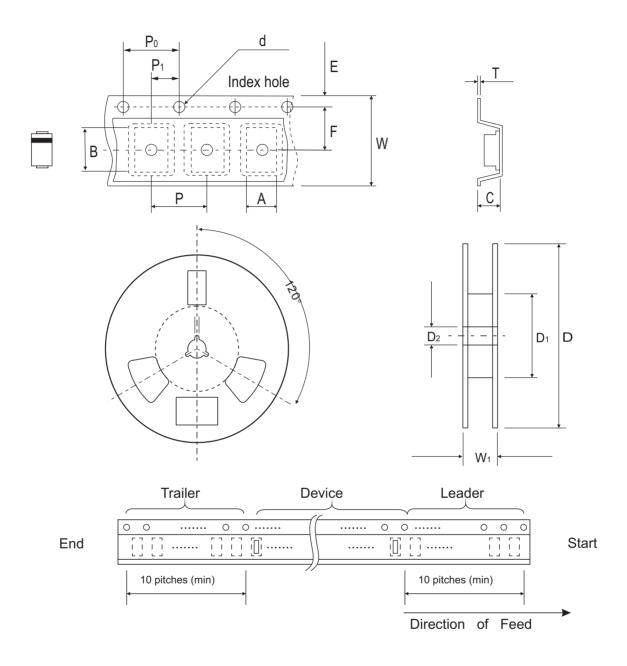
Fig.4- Typical Junction Capacitance



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Reel Taping Specification



DO 04440	SYMBOL	Α	В	С	d	D	D1	D2
DO-214AC (SMA)	(mm)	2.70 ± 0.10	5.30 ± 0.10	2.66 ± 0.10	1.50 ± 0.10	330 ± 2.00	62.0 MIN.	13.50 ± 0.50
	(inch)	0.106 ± 0.004	0.209 ± 0.004	0.105 ± 0.004	0.059 ± 0.004	12.99 ± 0.079	2.441 MIN.	0.531 ± 0.020

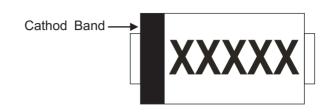
	SYMBOL	Е	F	Р	P ₀	P1	Т	W	W 1
DO-214AC (SMA)	(mm)	1.75 ± 0.10	5.50 ± 0.10	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.10	0.60 ± 0.10	12.0 ± 0.30	18.40 ± 1.00
, ,	(inch)	0.069 ± 0.004	0.217 ± 0.004	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.236 ± 0.004	0.472 ± 0.012	0.724 ± 0.039

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Marking Code

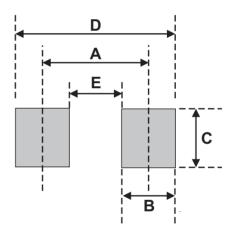
Part Number	Marking Code
CDBA540-HF	SK54
CDBA560-HF	SK56
CDBA5100-HF	SK510
CDBA5150-HF	SK515
CDBA5200-HF	SK520



xxxxx = Product type marking code

Suggested PAD Layout

SIZE	DO-214AC(SMA)			
OIZL	(mm)	(inch)		
Α	4.00	0.157		
В	2.50	0.100		
С	1.70	0.068		
D	6.50	0.256		
E	1.50	0.060		



Standard Packaging

	REEL PACK			
Case Type	REEL (pcs)	Reel Size (inch)		
DO-214AC (SMA)	5,000	13		

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