

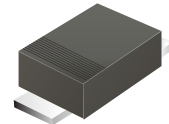
CDBAS540-HF Thru. CDBAS5200-HF

Reverse Voltage: 40 to 200 Volts

Forward Current: 5.0 Amp

RoHS Device

Halogen Free



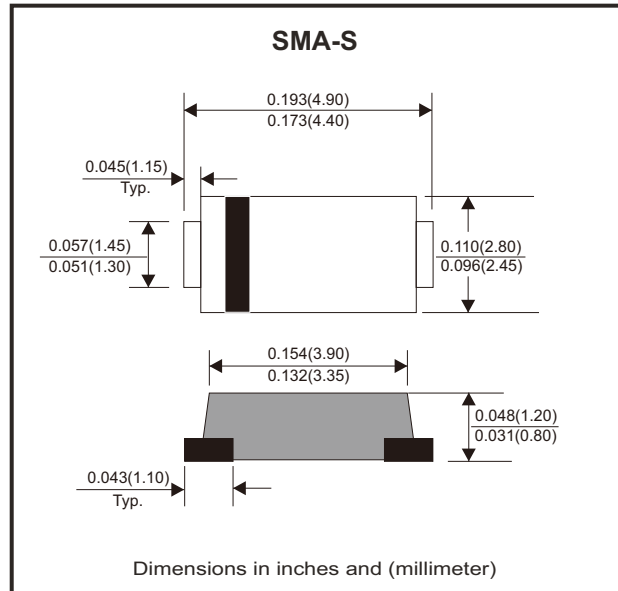
Features

- High surge and current capability.
- For use in low voltage, high frequency inverters free wheeling and polarity protection.
- Built-in strain relief.
- Silicon epitaxial planar chips.
- Metal silicon junction with guard ring.

Mechanical data

- Epoxy: UL94V-0 rate flame retardant.
- Case: Molded plastic, SMA-S.
- Terminals: Solderable per MIL-STD-750 method 2026.
- Polarity: Color band denotes cathode end.
- Mounting position: Any.

Operating junction temperature range



Circuit Diagram



Maximum Ratings and Electrical Characteristics (at TA=25°C unless otherwise noted)

Parameter	Symbol	CDBAS540 -HF	CDBAS560 -HF	CDBAS5100 -HF	CDBAS5150 -HF	CDBAS5200 -HF	Unit
Maximum repetitive peak reverse voltage	V_{RRM}	40	60	100	150	200	V
Maximum RMS voltage	V_{RMS}	28	42	70	105	140	V
Maximum DC blocking voltage	V_{DC}	40	60	100	150	200	V
Max. average forward rectified current at $T_L=100^\circ\text{C}$	$I_{(AV)}$	5.0					A
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load	I_{FSM}	100					A
Max. instantaneous forward voltage at 5A	V_F	0.55	0.70	0.85	0.95		V
Maximum DC reverse current at rated DC blocking voltage	$T_J=25^\circ\text{C}$	0.5		0.5			mA
	$T_J=100^\circ\text{C}$	20		10			
Typical thermal resistance	$R_{\theta JA}$	50.0					$^\circ\text{C/W}$
Operating junction temperature range	T_J	-55 to +150					$^\circ\text{C}$
Storage temperature range	T_{STG}	-55 to +150					$^\circ\text{C}$

Rating and Characteristic Curves (CDBAS540-HF Thru. CDBAS5200-HF)

Fig.1 - Derating Curve Output Rectified Current

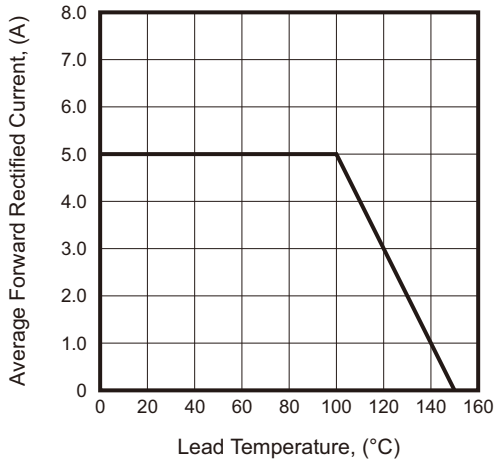


Fig.2 - Max. Non-Repetitive Peak Forward Surge Current Per Leg

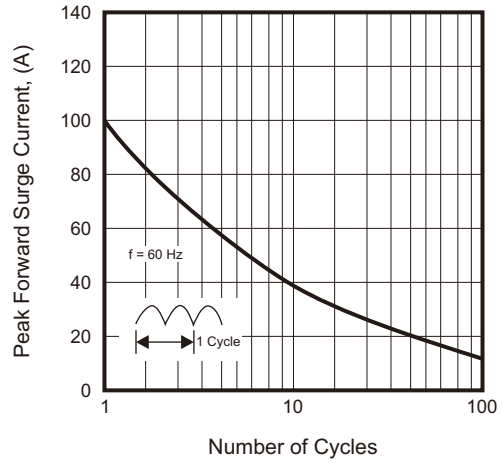


Fig.3 - Typical Forward Voltage Characteristics

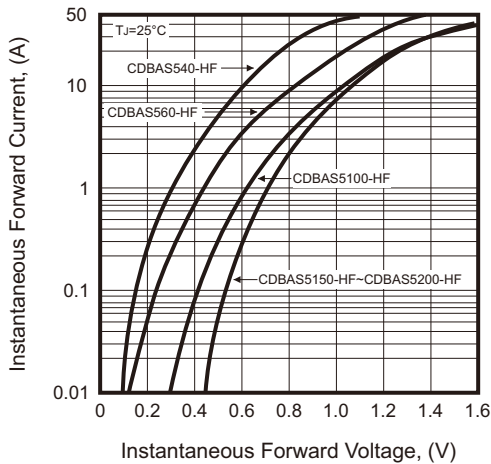
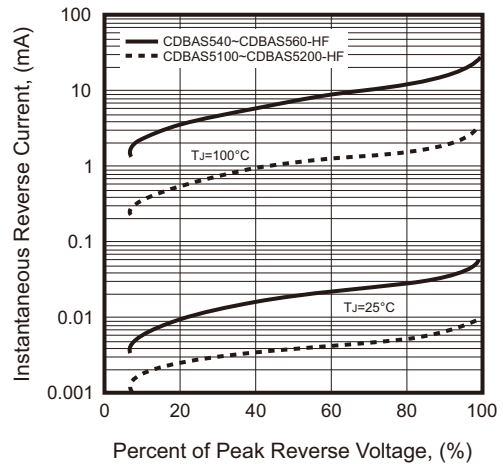
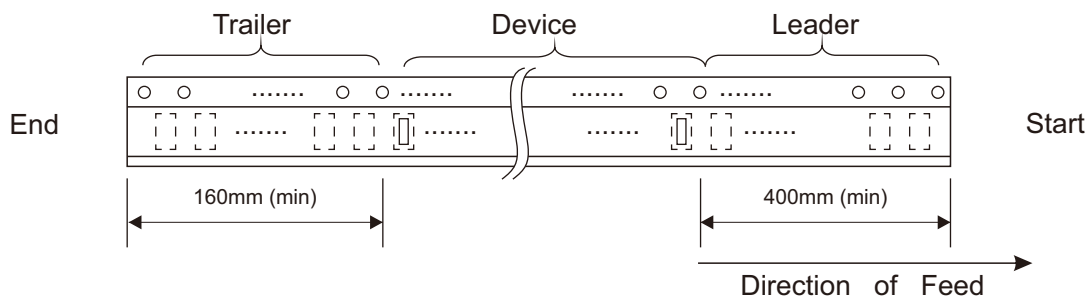
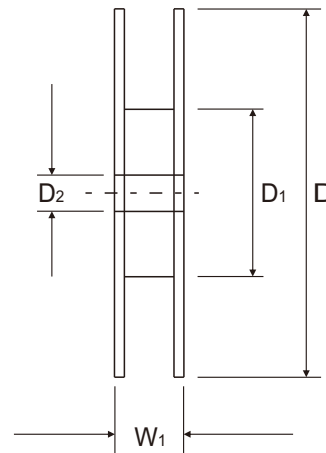
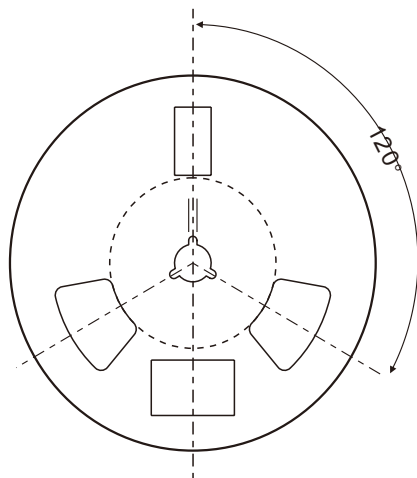
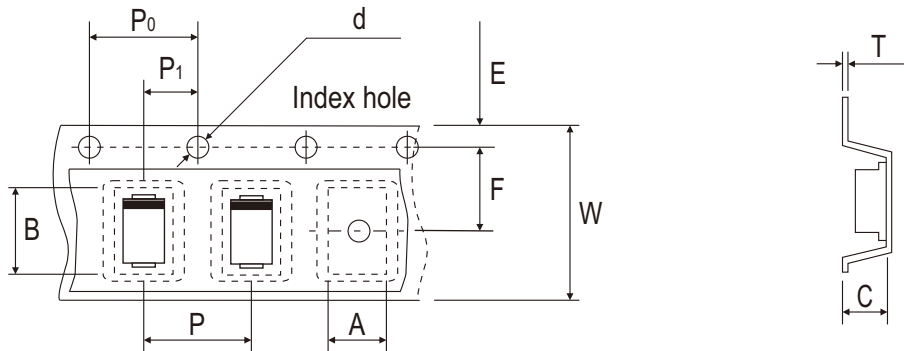


Fig.4 - Typical Reverse Leakage Characteristics



Reel Taping Specification



SMA-S	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	2.85 ± 0.10	5.10 ± 0.10	1.25 ± 0.05	1.55 ± 0.05	178.00 ± 2.00	75.00 ± 2.00	13.00 ± 0.50
	(inch)	0.112 ± 0.004	0.201 ± 0.004	0.049 ± 0.002	0.061 ± 0.002	7.008 ± 0.079	2.953 ± 0.079	0.512 ± 0.020

SMA-S	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	5.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.25 ± 0.05	12.00 ± 0.10	16.80 ± 4.00
	(inch)	0.069 ± 0.004	0.217 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.010 ± 0.002	0.472 ± 0.004	0.661 ± 0.157

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

REV:B

Marking Code

Part Number	Marking Code
CDBAS540-HF	54S
CDBAS560-HF	56S
CDBAS5100-HF	510S
CDBAS5150-HF	515S
CDBAS5200-HF	520S

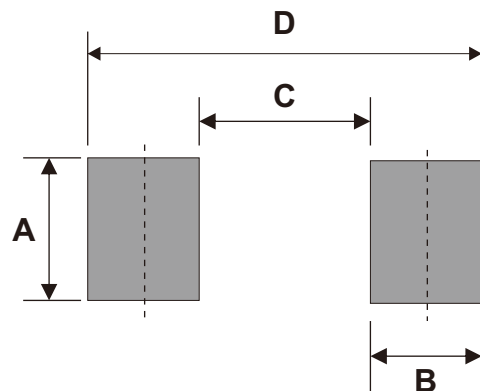


█ = Cathode band

xxx/xxxx = Product type marking code

Suggested PAD Layout

SIZE	DO-214AC/SMA-S	
	(mm)	(inch)
A	1.90	0.075
B	1.60	0.063
C	2.70	0.106
D	5.90	0.232



Note: 1.The pad layout is for reference purposes only.

Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
DO-214AC (SMA-S)	3,000	7