

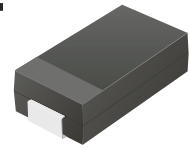
CDBA2150-HF Thru. CDBA2200-HF

Reverse Voltage: 150 to 200 Volts

Forward Current: 2.0 Amp

RoHS Device

Halogen Free

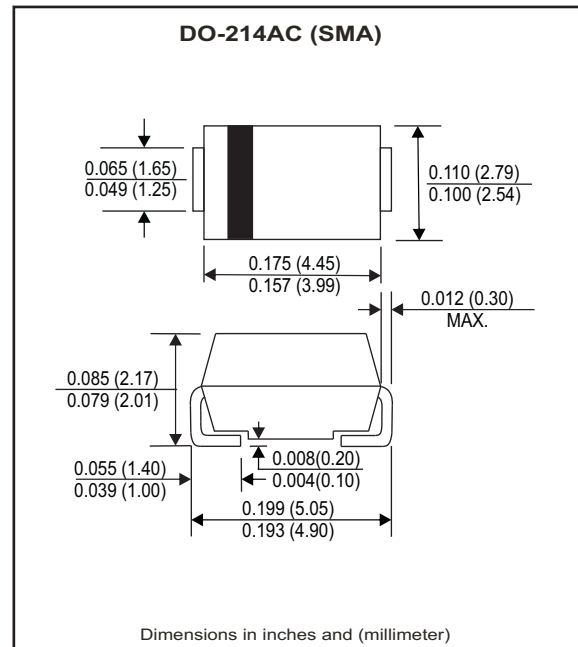


Features

- 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.
- Guardring 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 2150-HF	CDBA 2200-HF	Units
Max. repetitive peak reverse voltage	V_{RRM}	150	200	V
Max. DC blocking voltage	V_{DC}	150	200	V
Max. RMS voltage	V_{RMS}	105	140	V
Max. instantaneous forward voltage @ 1.0A, Ta=25°C	V_F	0.87	0.90	V
Operating Temperature	T_J	-50 to +150		°C

Parameter	Conditions	Symbol	MIN.	TYP.	MAX.	Units
Forward rectified current	see Fig.1	I_O			2.0	A
Forward surge current	8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}			50	A
Reverse Current	$V_R = V_{RRM}$ Ta=25°C	I_R			0.5	mA
	$V_R = V_{RRM}$ Ta=100°C	I_R			20	mA
Thermal Resistance	Junction to ambient	$R_{\theta JA}$		50		°C/W
Diode Junction capacitance	f=1MHz and applied 4V DC reverse Voltage	C_J		30		pF
Storage temperature		T_{STG}	-50		+150	°C

REV: B

Rating and Characteristic Curves (CDBA2150-HF Thru. CDBA2200-HF)

Fig.1 - Typical Forward Current Derating Curve

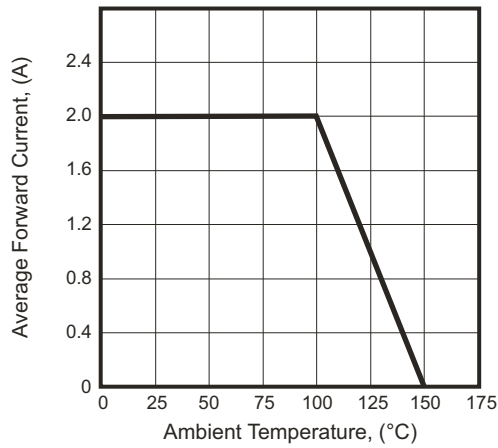


Fig.2 - Typical Forward Characteristics

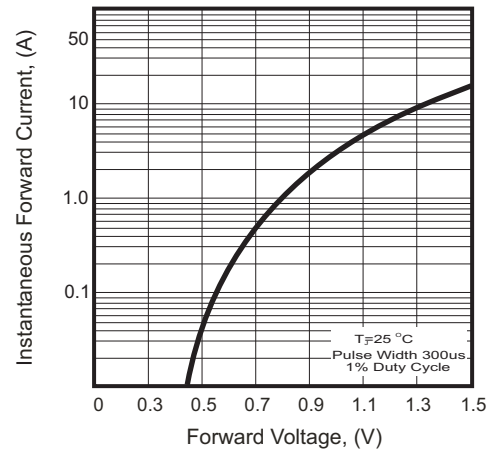


Fig.3 - Maximum Non-repetitive Forward Surge Current

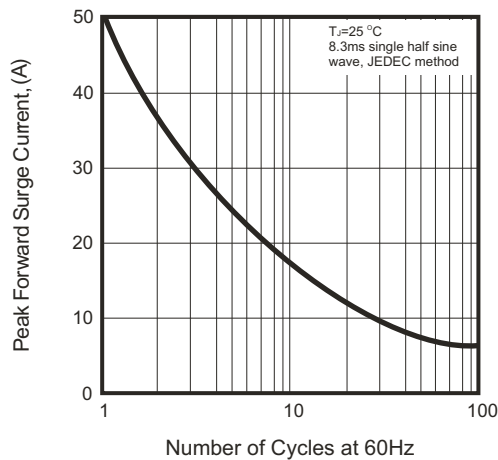


Fig.4 - Typical Junction Capacitance

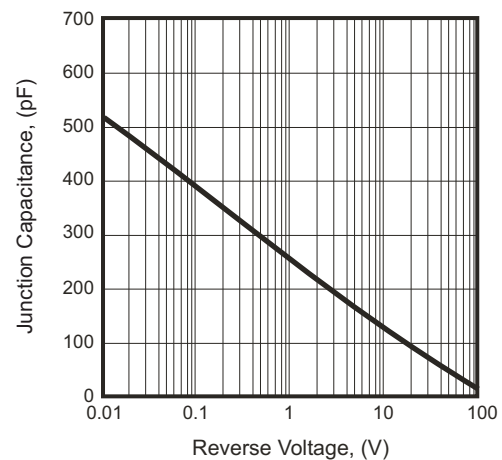
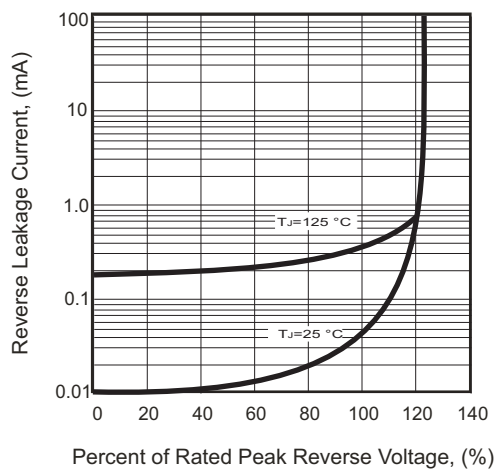
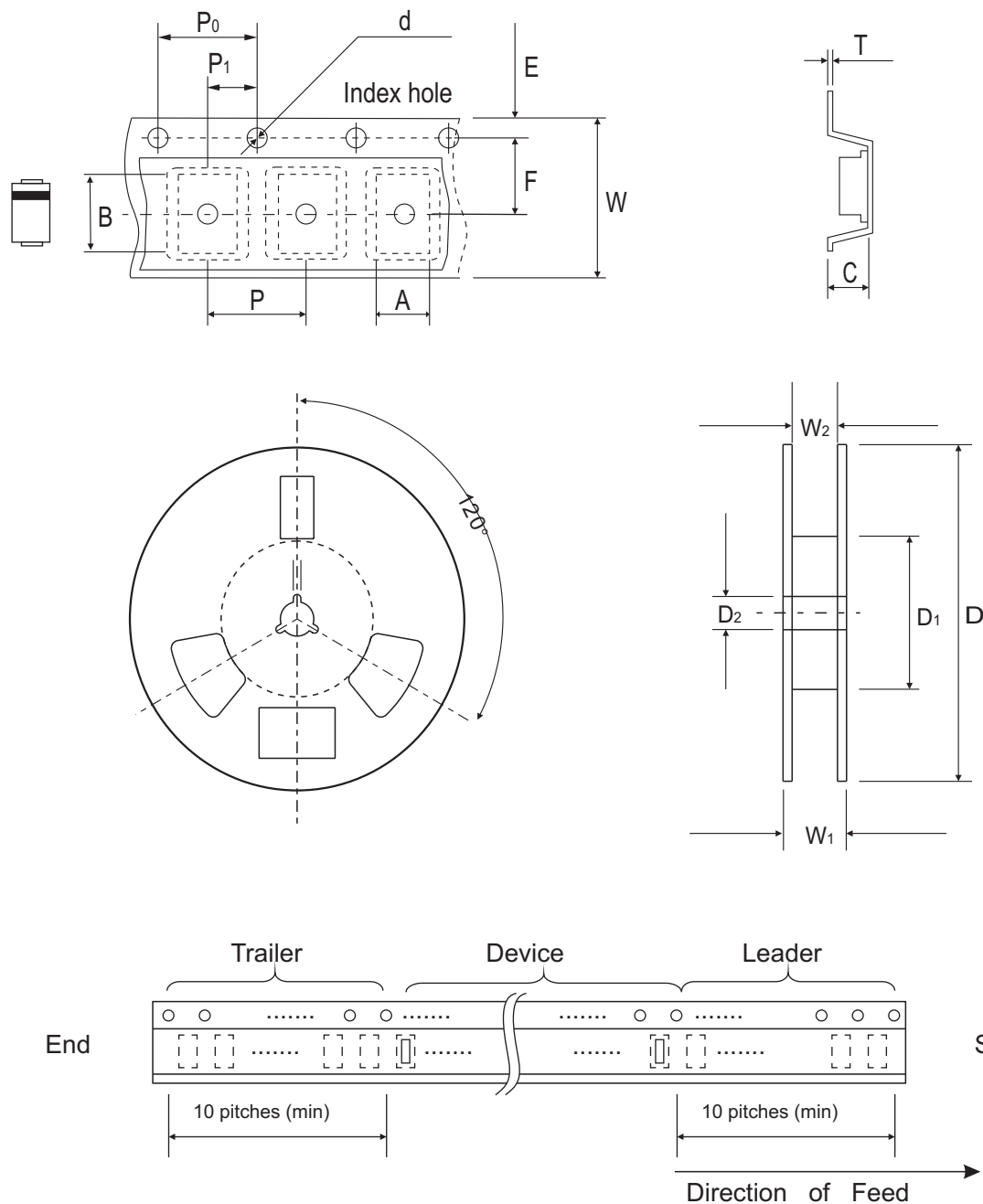


Fig.5 - Typical Reverse Characteristics



Reel Taping Specification



DO-214AC (SMA)	SYMBOL	A	B	C	d	D	D1	D2	E
	(mm)	2.70 (max)	5.30 (max)	2.66 (max)	1.50 ± 0.10	330.00 ± 2.00	50.00 (min)	13.50 ± 1.00	1.75 ± 0.10
	(inch)	0.106 (max)	0.209 (max)	0.105 (max)	0.059 ± 0.004	12.992 ± 0.079	1.969 (min)	0.531 ± 0.039	0.069 ± 0.004

DO-214AC (SMA)	SYMBOL	F	P	P_0	P_1	T	W	W_1	W_2
	(mm)	5.50 ± 0.05	4.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.60 (max)	12.00 ± 0.30	18.4 (max)	14.4 (max)
	(inch)	0.217 ± 0.002	0.157 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.024 (max)	0.472 ± 0.012	0.724 (max)	0.567 (max)

Marking Code

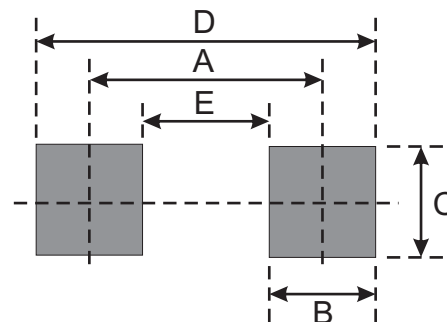
Part Number	Marking Code
CDBA2150-HF	SK215
CDBA2200-HF	SK220



xxxxxx = Product type marking code

Suggested PAD Layout

SIZE	DO-214AC (SMA)	
	(mm)	(inch)
A	4.00	0.157
B	2.50	0.098
C	1.70	0.067
D	6.50	0.256
E	1.50	0.059



Standard Packaging

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