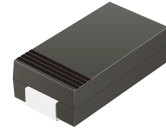


CDBC840-HF

Reverse Voltage: 40 Volts
Forward Current: 8.0 Amp

RoHS Device
Halogen Free

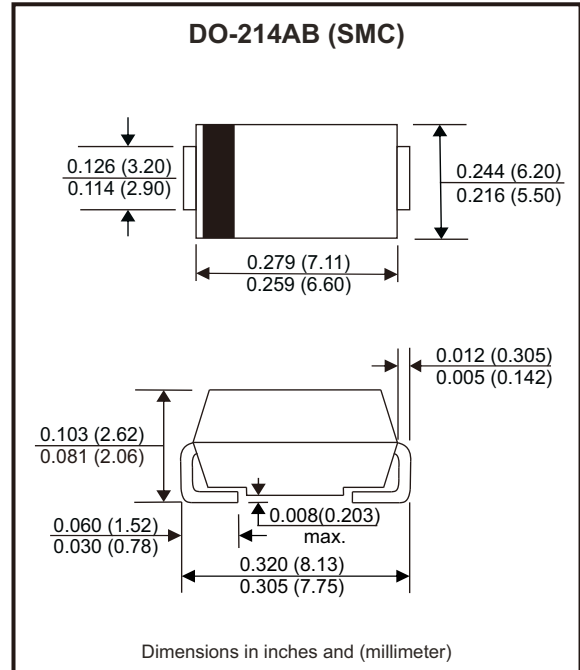


Features

- 8.0A rectification in small package.
- High surge and current capability.
- For use in low voltage, high frequency invertors free wheeling and polarity protection.
- Built-in strain relief.
- Metal silicon junction with guarding.

Mechanical data

- Case: Molded plastic, DO-214AB / SMC
- Epoxy: UL94-V0 rated flame retardant.
- Terminals: Solderable per MIL-STD-750, method 2026.
- Polarity: Color band denotes cathode end.
- Mounting Position: Any.
- Weight: 0.25 grams (approx.)



Circuit Diagram



Maximum Ratings and Electrical Characteristics

Ratings at Ta=25°C ambient temperature unless otherwise specified.

Parameter	Symbol	CDBC840-HF	Units
Max. Recurrent peak reverse voltage	VRRM	40	V
Max. DC blocking voltage	VDC	40	V
Max. RMS voltage	VRMS	28	V
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	125	A
Max. Average forward rectified current 1"x1", 2 oz copper pad area, see Fig.1	I _{AV}	8	A
Max. Forward voltage at 8.0A (Note 1)	V _F	0.57	V
Max. DC reverse current @T _A =25°C at rated DC blocking voltage @T _A =100°C	I _R	0.5 20	mA
Typical junction capacitance (Note 2)	C _J	350	pF
Operating junction temperature range	T _J	-55 to +125	°C
Storage temperature range	T _{STG}	-55 to +150	°C

Notes: 1. Pulse test: 300µs pulse width, 1% duty cycle.

2. Measured at 1.0MHz and applied reverse voltage of 4.0 Volts.

3. Thermal resistance from junction to ambient and from junction to lead P.C.B. mounted on 1"x1", 2 oz copper pad areas.

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

REV:A

RATING AND CHARACTERISTIC CURVES (CDBC840-HF)

Fig.1 - Forward Current Derating Curve

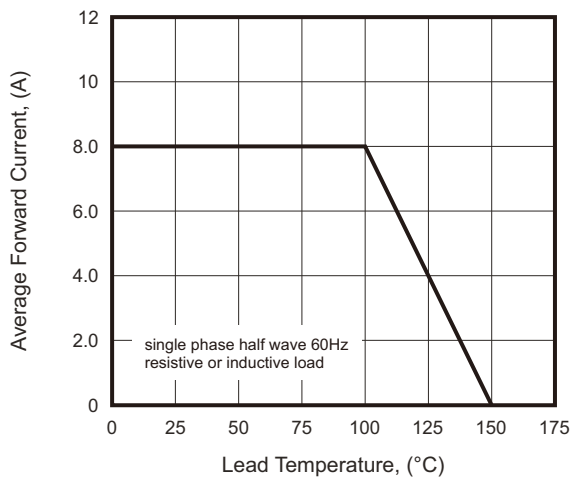


Fig.2 - Max. Non-Repetitive Peak Forward Surge Current

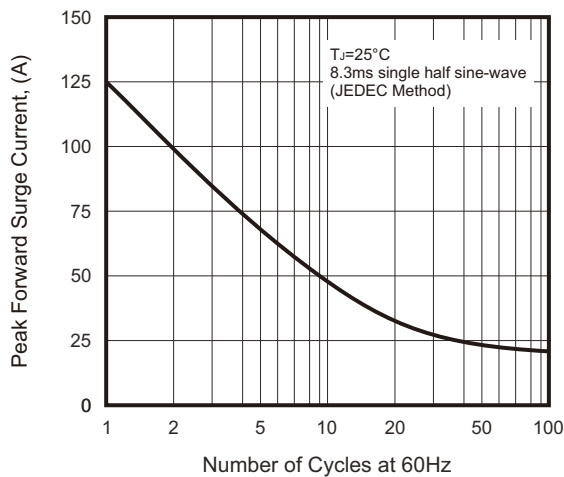


Fig.3 - Typical Instantaneous Forward Characteristics

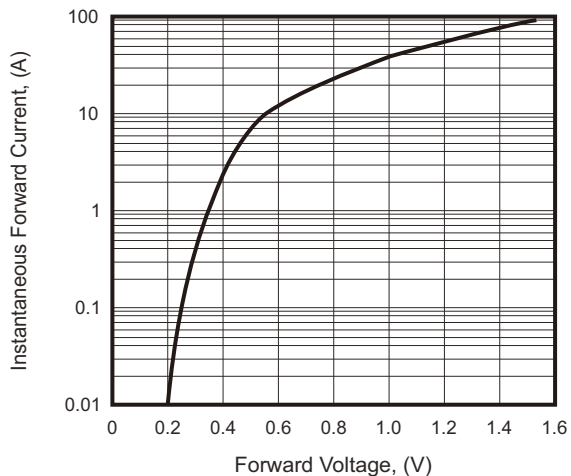
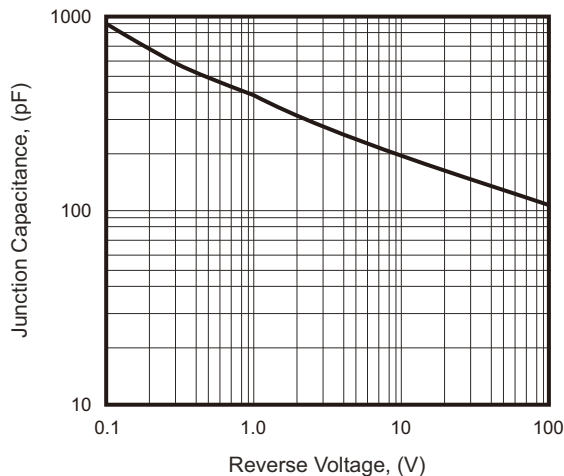
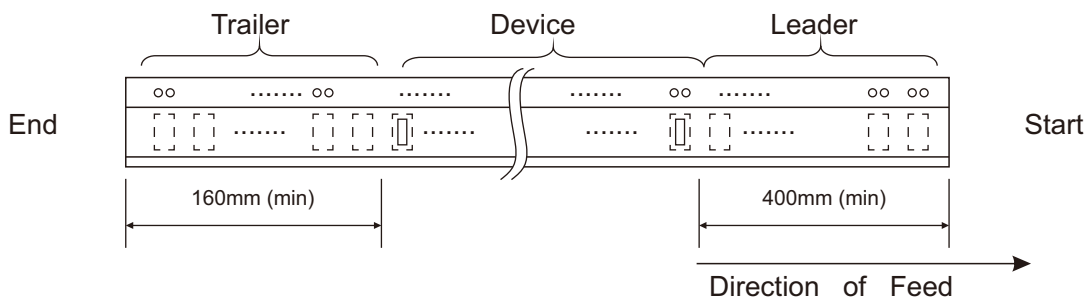
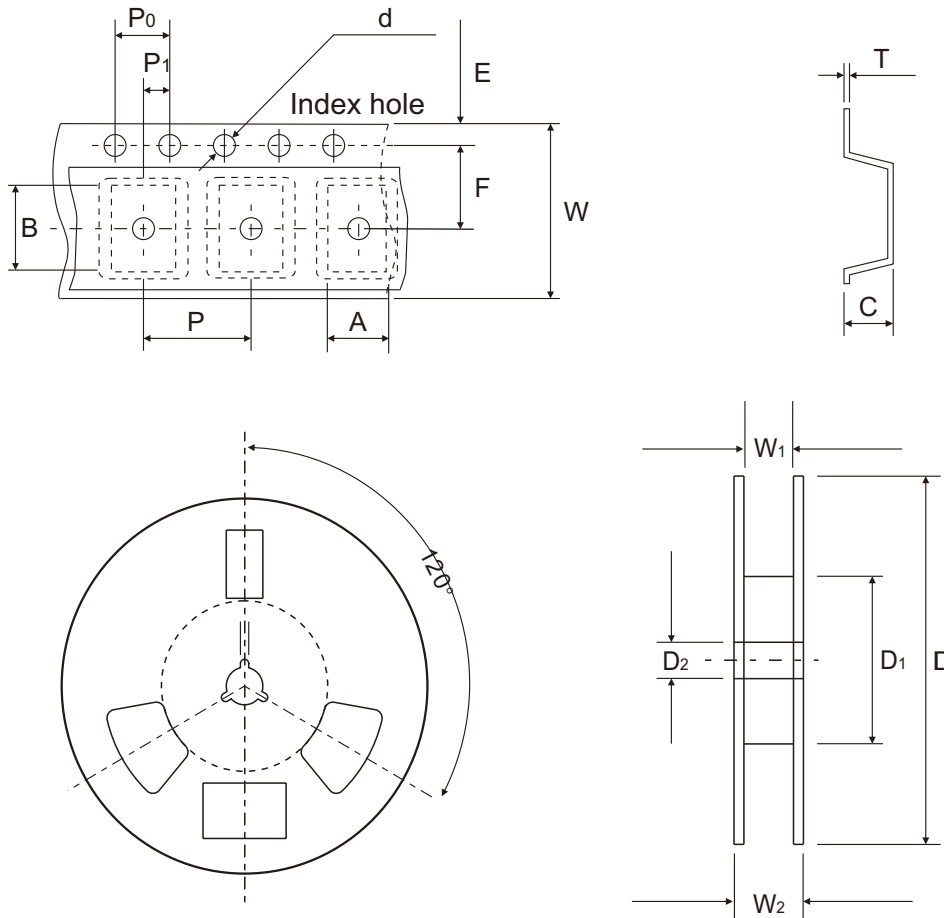


Fig.4 - Typical Junction Capacitance



Reel Taping Specification



SMC	SYMBOL	A	B	C	d	T	D	D1	D2
	(mm)	6.30	8.30	2.54	1.55	0.25	330	75.00	13.50
	(inch)	0.248	0.327	0.100	0.061	0.010	12.992	2.953	0.531

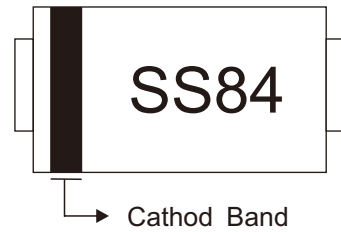
SMC	SYMBOL	E	F	P	P0	P1	W	W1	W2
	(mm)	1.75	7.50	8.00	4.00	2.00	16.00	17.00	21.00
	(inch)	0.069	0.295	0.315	0.157	0.079	0.630	0.669	0.827

Note: The tolerance of carrier tape and top cover is 0.2mm, the tolerance of reel is 2mm.

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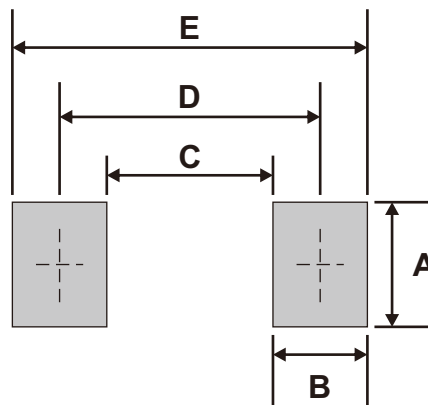
Marking Code

Part Number	Marking Code
CDBC840-HF	SS84



Suggested PAD Layout

SIZE	DO-214AB(SMC)	
	(mm)	(inch)
A	3.30	0.130
B	2.50	0.098
C	4.40	0.173
D	6.90	0.272
E	9.30	0.366



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
DO-214AB (SMC)	3,000	13