

CDBAS340L-HF

Reverse Voltage: 40 Volts

Forward Current: 3.0 Amp

RoHS Device

Halogen Free

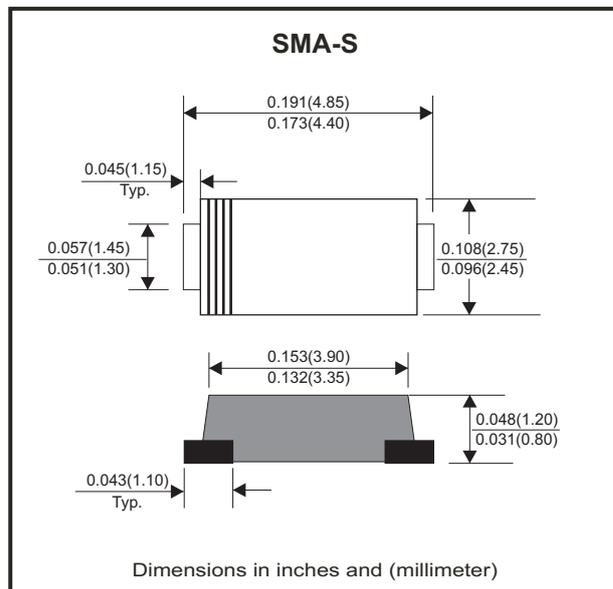


Features

- High surge and current capability
- For use in low voltage, high frequency invertors 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: Solder plated solderable per MIL-STD-750 method 2026
- Polarity: Color band denotes cathode end
- Mounting position: Any
- Weight: 0.045 grams(approx.)



Circuit diagram



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

Parameter	Symbol	Value	Unit	
Maximum recurrent peak reverse voltage	V_{RRM}	40	V	
Maximum DC blocking voltage	V_{DC}	40	V	
Maximum RMS voltage	V_{RMS}	28	V	
Maximum forward voltage at 3.0A (note1)	V_F	0.40	V	
Maximum average forward rectified current 0.2 x 0.2" (5.0x5.0mm) copper pad area, see Figure 1	$I_{F(AV)}$	3.0	A	
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	80	A	
Maximum DC reverse current at rated DC blocking voltage	$T_J=25^{\circ}C$	0.5	mA	
	$T_J=100^{\circ}C$	10		
Typical junction capacitance (note2)	C_J	450	pF	
Typical thermal resistance (note3)	Junction to Ambient	$R_{\theta JA}$	50.0	$^{\circ}C/W$
	Junction to lead	$R_{\theta JL}$	40.0	$^{\circ}C/W$
Operating junction temperature range	T_J	-55 to +150	$^{\circ}C$	
Storage temperature range	T_{STG}	-55 to +150	$^{\circ}C$	

Notes: 1. Pulse test: 300 μ S 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 0.2x0.2" (5.0x5.0mm) copper pad areas.

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

REV: A

RATING AND CHARACTERISTIC CURVES (CDBAS340L-HF)

Fig.1 - Forward Current Derating Curve

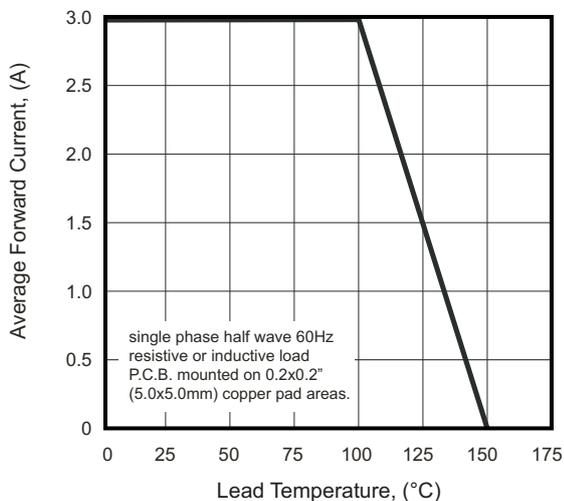


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current

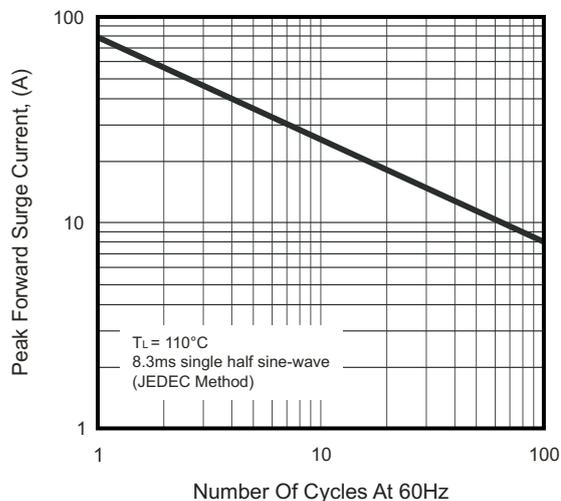


Fig.3 - Typical Instantaneous Forward Characteristics

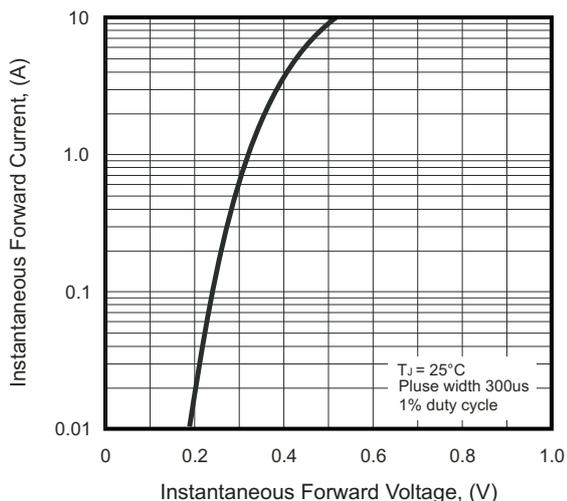


Fig.4 - Typical Reverse Characteristics

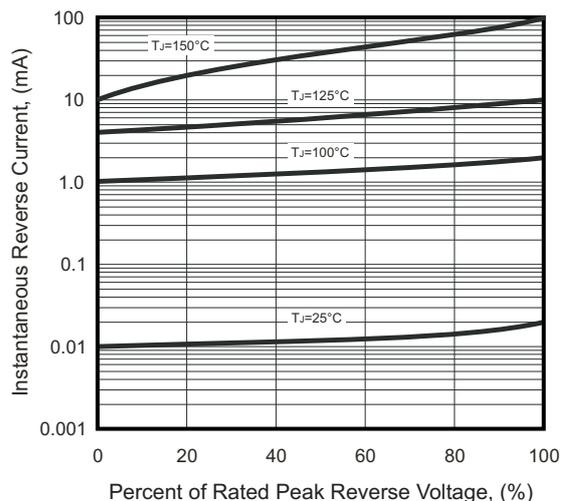
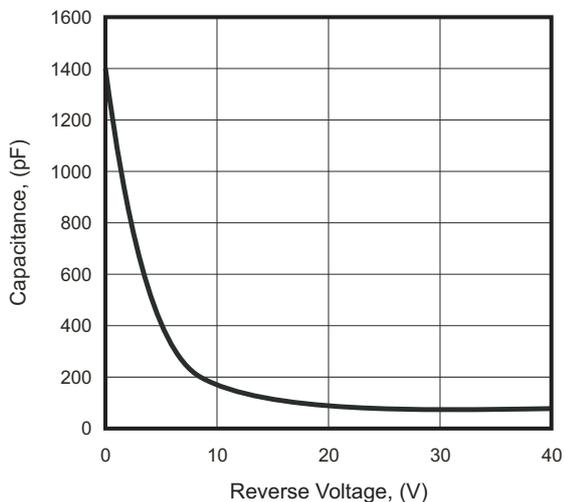


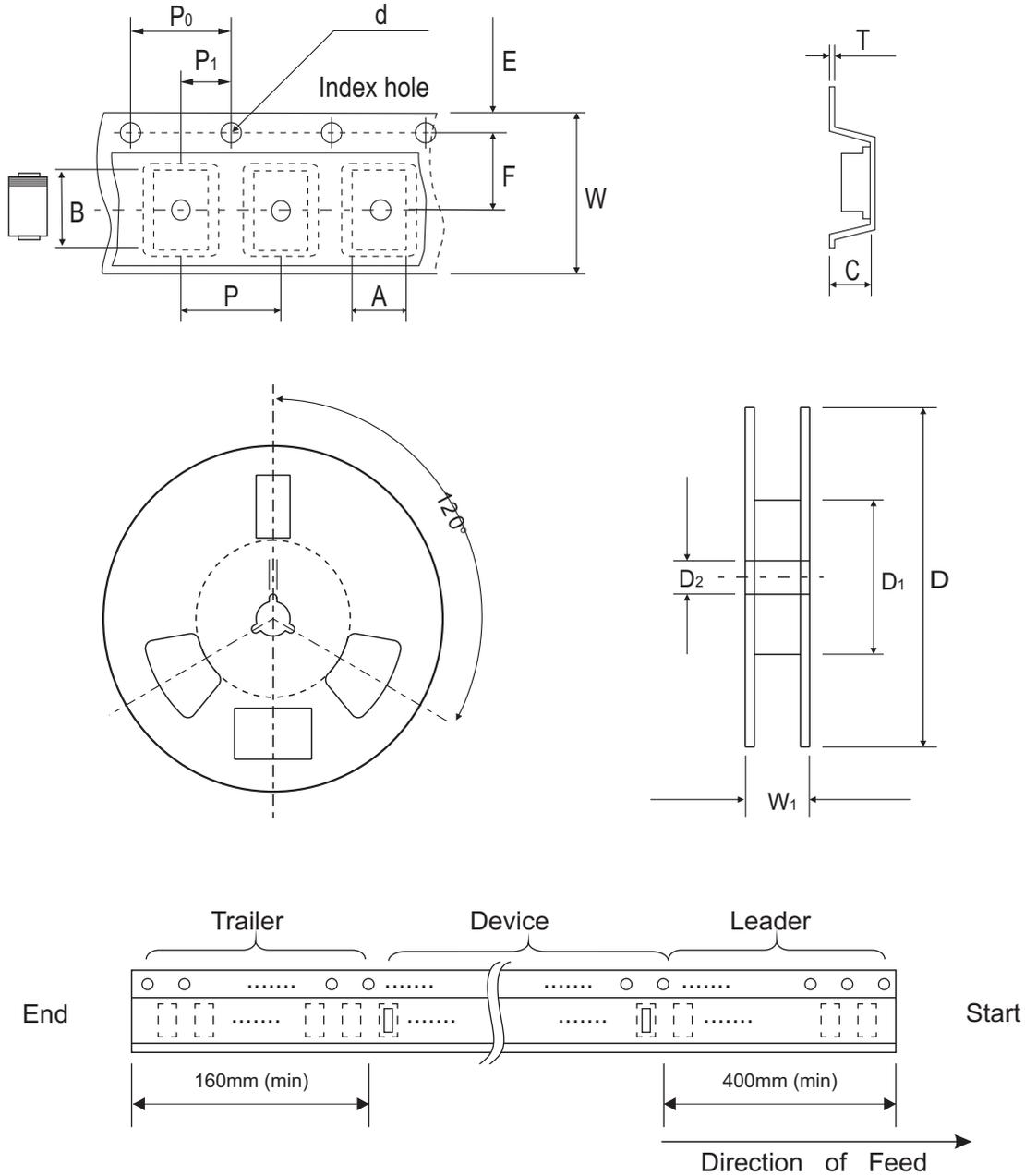
Fig. 5 - Typical Junction Capacitance



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REV: A

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

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REV: A

Marking Code

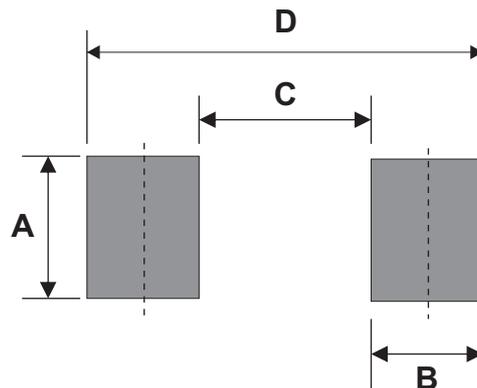
Part Number	Marking Code
CDBAS340L-HF	3L45



|||| = Cathod band

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



Standard Packaging

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