

CDBABS34-HF Thru. CDBABS310-HF

Reverse Voltage: 40 to 100 V

Forward Current: 3.0 A

RoHS Device

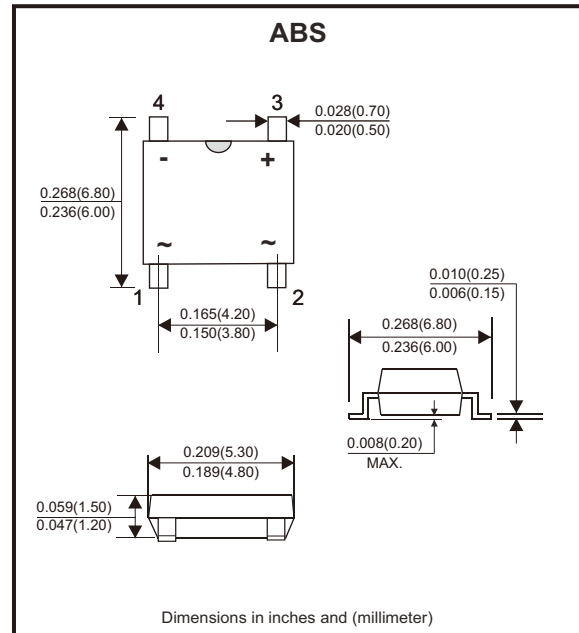
Halogen Free

Features

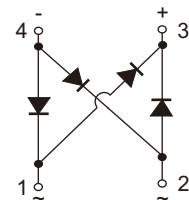
- Schottky barrier chip.
- Low power loss, high efficiency.
- Ideally suited for automatic assembly.
- Surge overload rating to 80A peak.
- Plastic case material has UL Flammability classification rating 94V-0.

Mechanical data

- Case: ABS, molded plastic.
- Terminals: plated leads solderable per MIL-STD-202, method 208.
- Polarity: As marked on case.
- Mounting position: Any.
- Marking: Type number.



Circuit Diagram



Maximum Rating and Electrical Characteristics

Rating at $T_A=25^{\circ}\text{C}$, unless otherwise noted.
 Single phase, half wave, 60Hz, resistive or inductive load.
 For capacitive load, derate current by 20%.

Parameter		Symbol	CDBABS34-HF	CDBABS36-HF	CDBABS38-HF	CDBABS310-HF	Unit
Peak repetitive reverse voltage		V _{RRM}	40	60	80	100	V
Working peak reverse voltage		V _{RWM}	40	60	80	100	
DC blocking voltage		V _{DC}	40	60	80	100	
RMS reverse voltage		V _{RMS}	28	42	56	70	V
Average rectified output current @ T _c =100°C		I _o	3				A
Non-repetitive peak forward surge current 8.3ms single half sine-wave, superimposed on rated load (JEDEC method)		I _{FSM}	80				A
Rating for fusing (t<8.3ms)		I ² t	3.74				A ² s
Forward voltage per element @ I _F =3A		V _F	0.5	0.7	0.85		V
Peak reverse current at rated DC blocking voltage	@T _J =25°C	I _R	0.1		0.05		mA
	@T _J =100°C		10		5		
Typical thermal resistance per leg		R _{θJA}	50				°C/W
		R _{θJL}	10				
Operating junction temperature range		T _J	-55 to +150				°C
Storage temperature range		T _{STG}	-55 to +150				°C

Typical Rating and Characteristic Curves (CDBABS34-HF Thru. CDBABS310-HF)

Fig.1 - Output Current Derating Curve

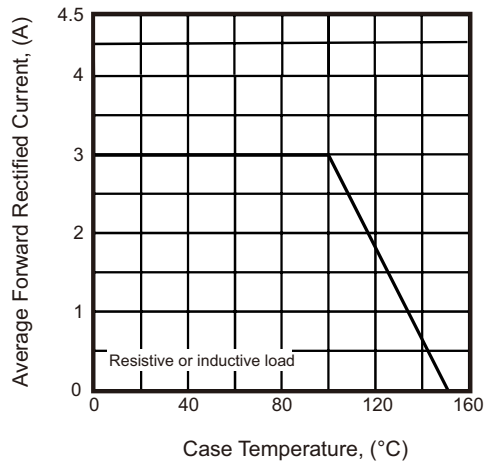


Fig.2 - Typical Forward Characteristics (per leg)

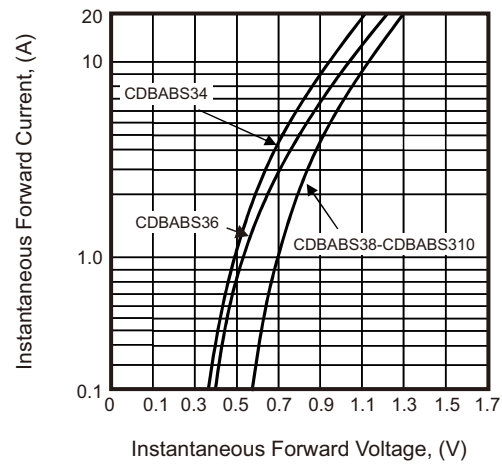


Fig.3 - Maximum Peak Forward Surge Current (per leg)

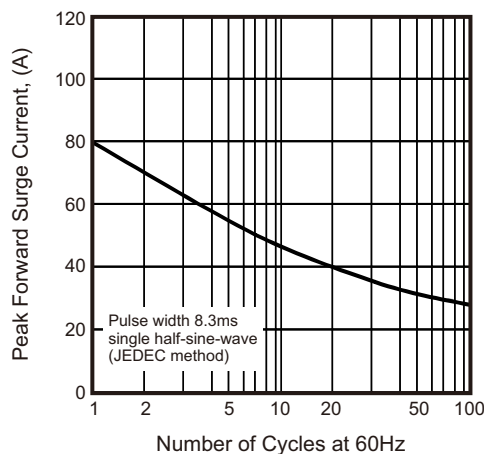


Fig.4 - Typical Reverse Characteristics

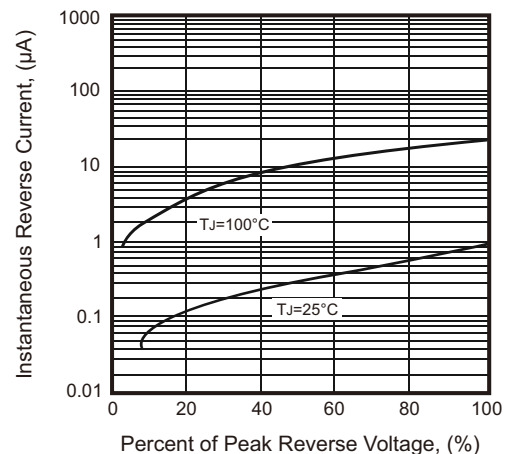
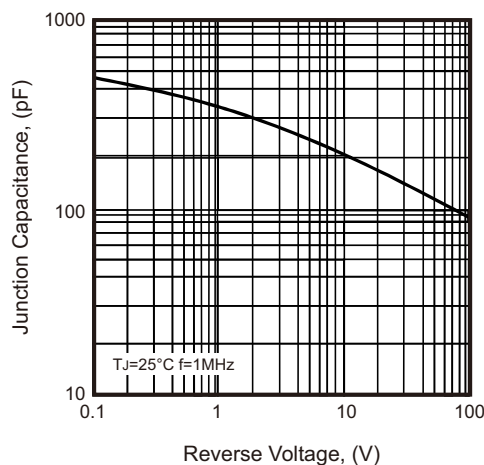
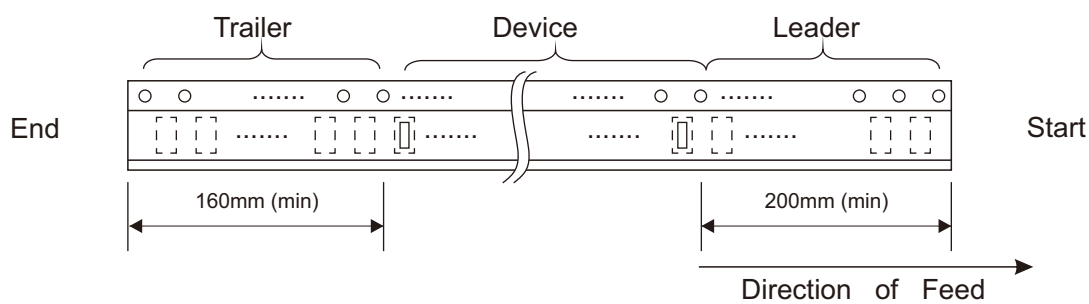
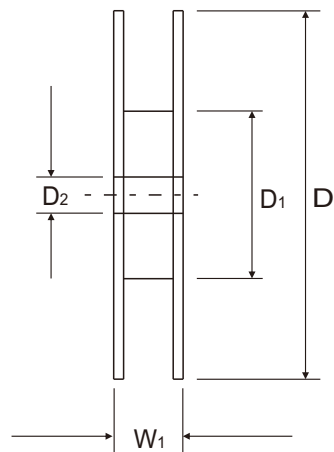
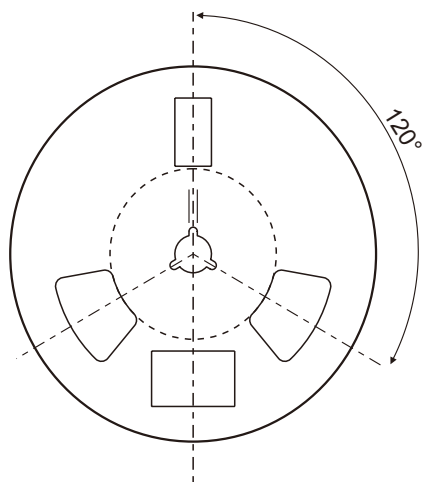
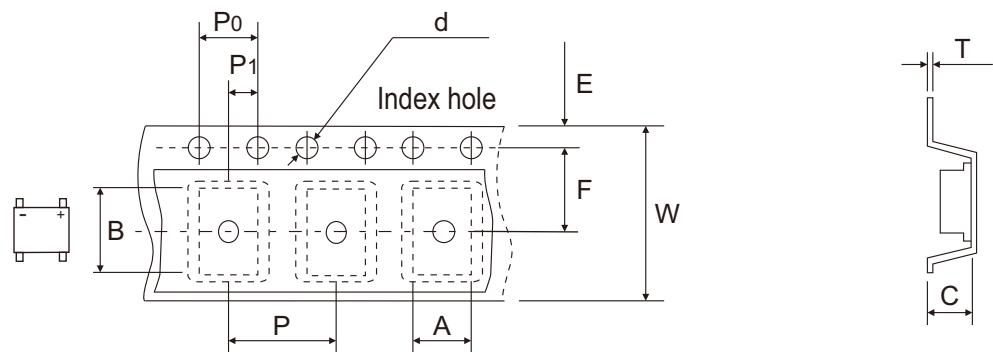


Fig.5 - Typical Junction Capacitance



Reel Taping Specification

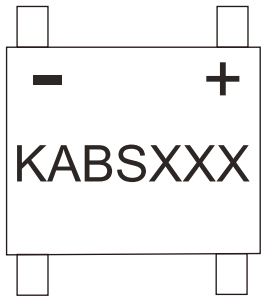


ABS	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	5.31 ± 0.10	6.68 ± 0.10	1.59 ± 0.20	1.55 ± 0.05	330	50.00 (min)	13.00 ± 0.20
	(inch)	0.209 ± 0.004	0.263 ± 0.004	0.063 ± 0.008	0.061 ± 0.002	13.000	1.969 (min)	0.512 ± 0.008

ABS	SYMBOL	E	F	P	P0	P1	T	W	W1
	(mm)	1.75 ± 0.10	5.50 ± 0.05	8.00 ± 0.10	4.00 ± 0.10	2.00 ± 0.05	0.30	12.00 ± 0.30	12.00~14.40
	(inch)	0.069 ± 0.004	0.217 ± 0.002	0.315 ± 0.004	0.157 ± 0.004	0.079 ± 0.002	0.012	0.472 ± 0.012	0.472~0.657

Marking Code

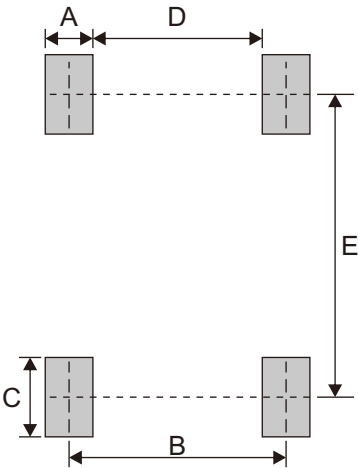
Part Number	Marking code
CDBABS34-HF	KABS34H
CDBABS36-HF	KABS36H
CDBABS38-HF	KABS38H
CDBABS310-HF	KABS310H



XXX = Product type marking code

Suggested P.C.B. PAD Layout

SIZE	ABS	
	(mm)	(inch)
A	0.90	0.035
B	4.10	0.161
C	1.50	0.059
D	3.20	0.126
E	5.72	0.225



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
ABS	5,000	13