

KMB34S-HF Thru. KMB320S-HF

Reverse Voltage: 40 to 200 V

Forward Current: 3 A

RoHS Device

Halogen Free



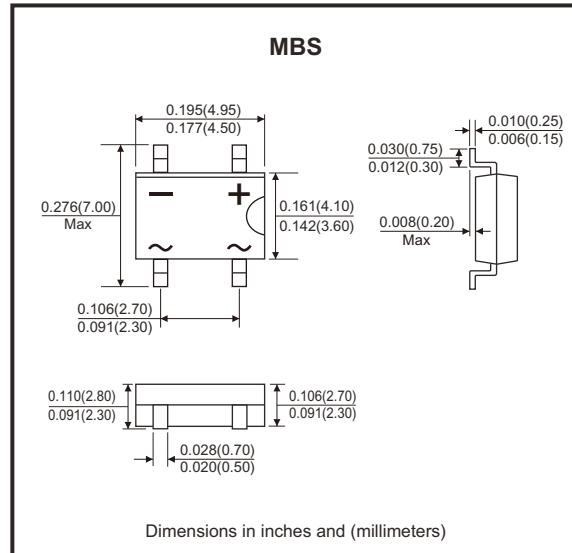
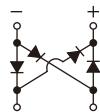
Features

- Schottky barrier chip.
- For surface mounted application.
- Low power loss, high efficiency.
- High current capability.
- High reliability.

Mechanical data

- Case: MBS, molded plastic.
- Terminals: Plated leads solderable per MIL-STD-202, method 208.
- Polarity: As marked on case.

Circuit Diagram



Maximum Ratings and Electrical Characteristics

(at TA=25°C, unless otherwise specified)

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Parameter	Symbol	KMB					Unit
		34S-HF	36S-HF	310S-HF	315S-HF	320S-HF	
Peak repetitive reverse voltage	V _{RRM}	40	60	100	150	200	V
RMS reverse voltage	V _{RMS}	28	42	70	105	140	V
DC blocking voltage	V _{DC}	40	60	100	150	200	V
Average rectified output current @T _c =100°C	I _O			3			A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I _{FSM}			80			A
T _J =25°C				64			
T _J =125°C							
I ² t rating for fusing (t< 8.3ms)	I ² t			26.56			A ² s
Maximum instantaneous forward voltage @ I _F =3A	V _F	0.55	0.7	0.85	0.90		V
Maximum DC reverse current at rated DC blocking voltage	I _R	0.1		0.05			mA
		10		5			
Typical junction capacitance (Note 1)	C _J	155	105	80	50		pF
Typical thermal resistance	R _{θJA}	100					°C/W
	R _{θJL}	15					°C/W
	R _{θJC}	10					°C/W
Operating junction temperature range	T _J	-55 to +150					°C
Storage temperature range	T _{STG}	-55 to +150					°C

Notes: 1. Measured at 1MHz and applied reverse voltage of 4V D.C.

REV:A

SMD Schottky Bridge Rectifiers

Comchip
SMD Diode Specialist

Typical Rating and Characteristics Curves (KMB34S-HF Thru. KMB320S-HF)

Fig.1 - Forward Current Derating Curve

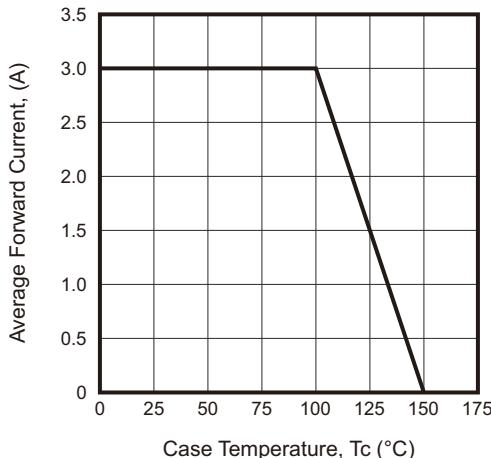


Fig.2 - Typical Forward Characteristics

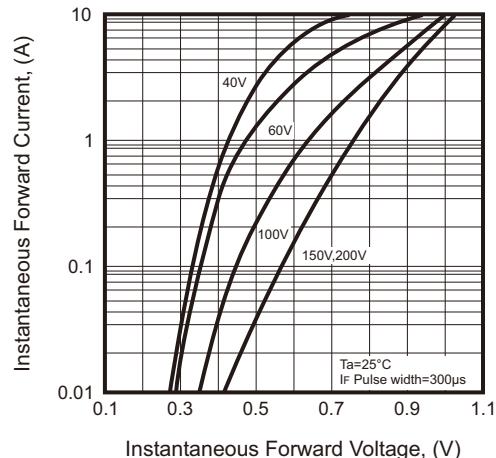


Fig.3 - Forward Surge Current Capability

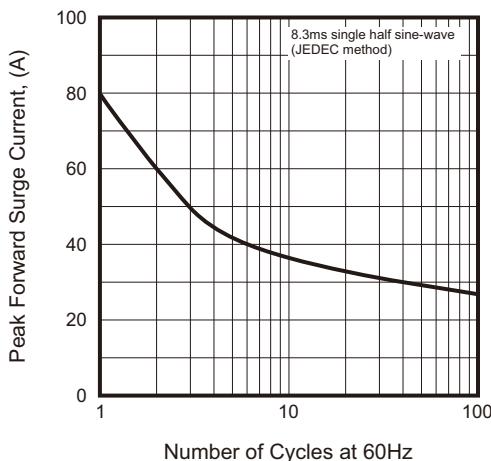
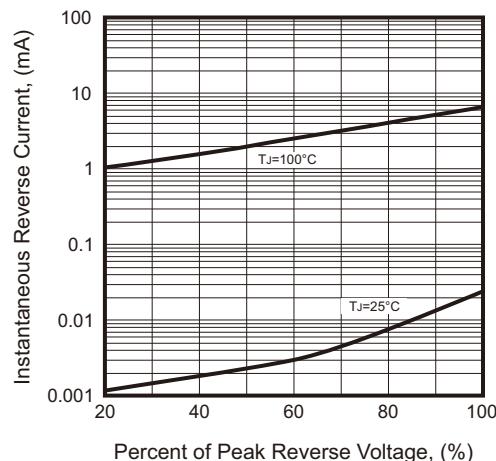
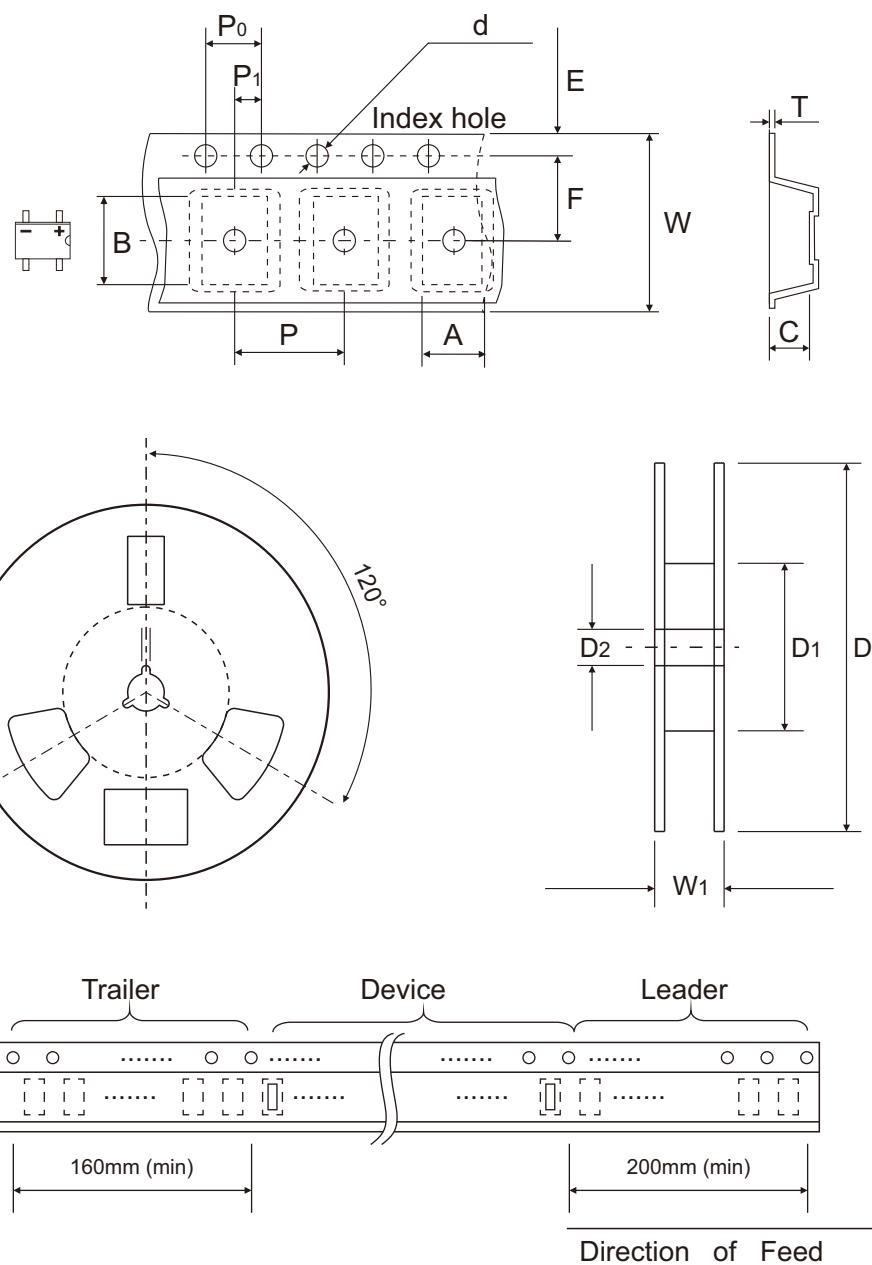


Fig.4 - Typical Reverse Characteristics



Reel Taping Specification

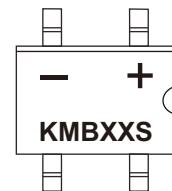


MBS	SYMBOL	A	B	C	d	D	D1	D2
	(mm)	4.90 ± 0.10	7.22 ± 0.10	2.88 ± 0.10	1.55 ± 0.05	330.00 ± 1.00	100.00 ± 0.50	$13.00 + 0.50 - 0.00$
	(inch)	0.193 ± 0.004	0.284 ± 0.004	0.113 ± 0.004	0.061 ± 0.002	12.992 ± 0.039	3.937 ± 0.020	$0.512 + 0.020 - 0.000$

MBS	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	0.27 ± 0.03	12.00 ± 0.10	18.40 Max
	(inch)	0.069 ± 0.004	0.217 ± 0.002	0.315 ± 0.004	0.157 ± 0.004	0.079 ± 0.004	0.011 ± 0.001	0.472 ± 0.004	0.724 Max

Marking Code

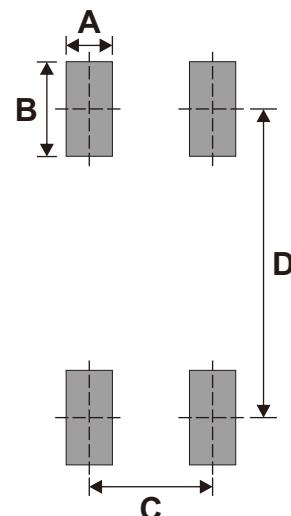
Part Number	Marking Code
KMB34S-HF	KMB34S
KMB36S-HF	KMB36S
KMB310S-HF	KMB310S
KMB315S-HF	KMB315S
KMB320S-HF	KMB320S



XX/XXX = Product type marking code

Suggested P.C.B. PAD Layout

SIZE	MBS	
	(mm)	(inch)
A	0.90	0.035
B	1.84	0.072
C	2.40	0.094
D	6.00	0.236



Standard Packaging

Case Type	REEL PACK	
	REEL (pcs)	Reel Size (inch)
MBS	3,000	13