

ABS Plastic-Encapsulate Bridge Rectifier

General Purpose Schottky Bridge Rectifier

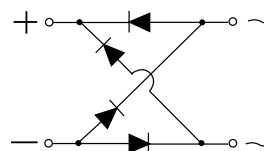
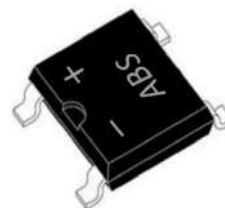
Features

- $I_{F(AV)}$ 1A
- V_{RRM} 20V-250V
- High surge current capability
- Low Power Loss, High Efficiency

Applications

- General purpose 1 phase Bridge rectifier applications

ABS



Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	KABS 12	KABS 13	KABS 14	KABS 15	KABS 16	KABS 18	KABS 110	KABS 115	KABS 120	KABS 125	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	20	30	40	50	60	80	100	150	200	250	V
RMS Reverse Voltage	$V_{R(RMS)}$	14	21	28	35	42	56	70	105	140	175	V
Average Rectified Output Current @ $T_L = 90^\circ\text{C}$	I_O	1.0										A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30										A
Forward Voltage @ $I_F = 1.0\text{A}$	V_{FM}	0.50		0.65		0.85		0.90		0.98		V
Peak Reverse Current @ $T_A = 25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A = 100^\circ\text{C}$	I_{RM}	50.0 20										uA mA
Typical Thermal Resistance (Note 1)	$R_{\theta JL}$ $R_{\theta JA}$	10 50										$^\circ\text{C/W}$
Typical Junction Capacitance	C_j	110										pF
Operating Temperature Range	T_j	-65 to +150										$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-65 to +150										$^\circ\text{C}$

Note: 1. Mounted on P.C. Board with 5.0mm² copper pad area.

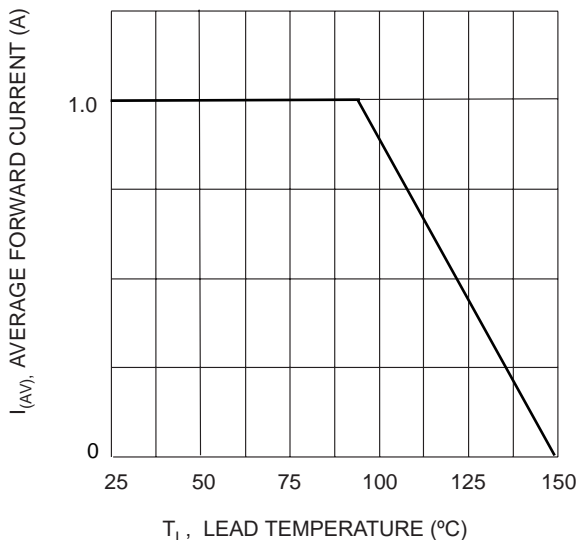


Fig. 1 Forward Current Derating Curve

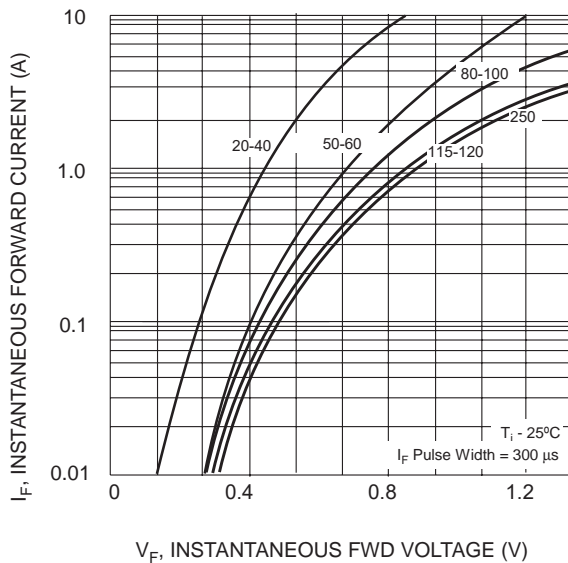


Fig. 2 Typ. Forward Characteristics

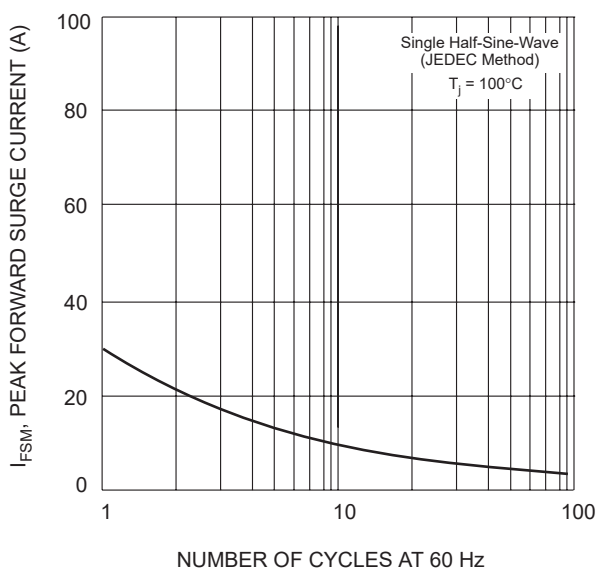


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

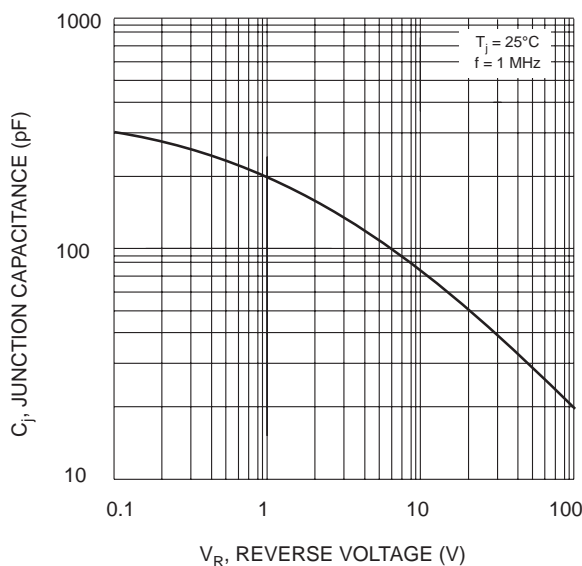


Fig. 4 Typical Junction Capacitance

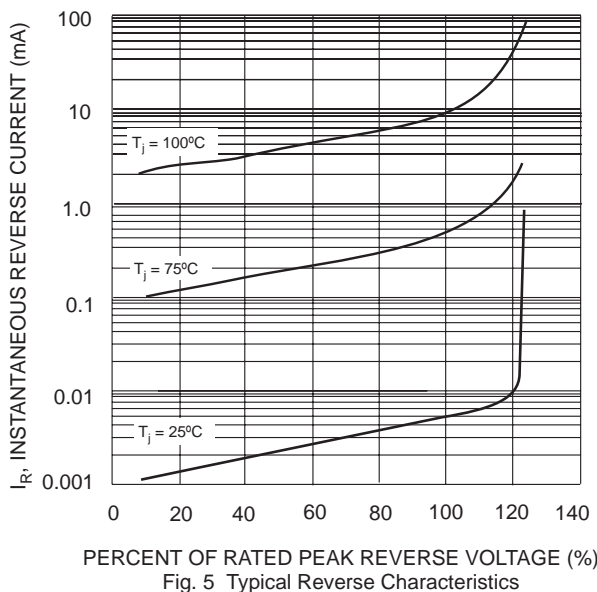
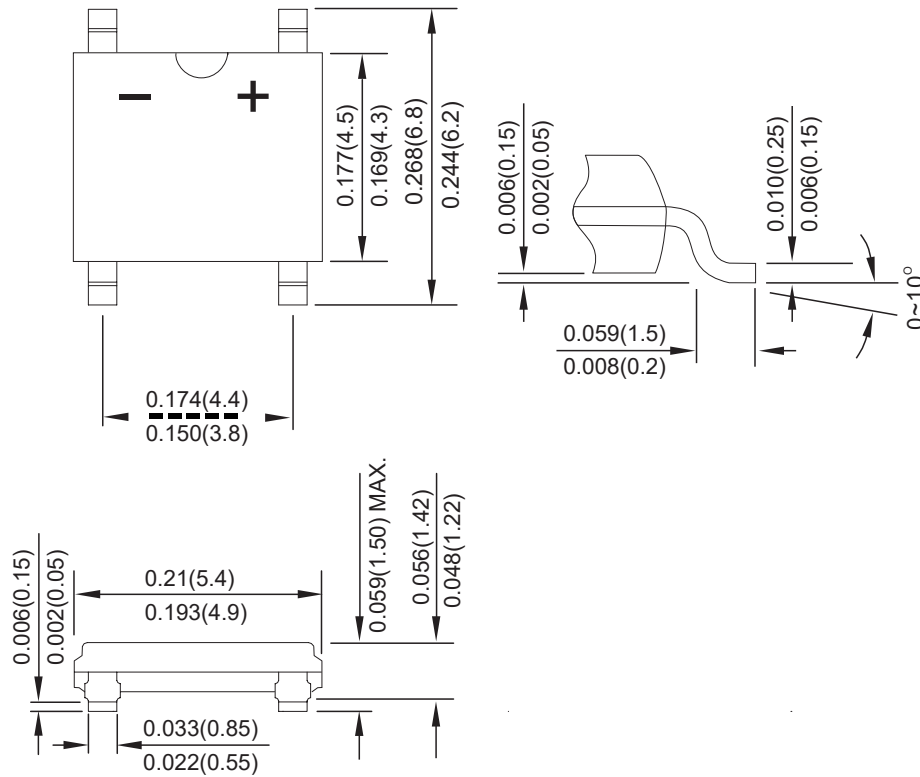


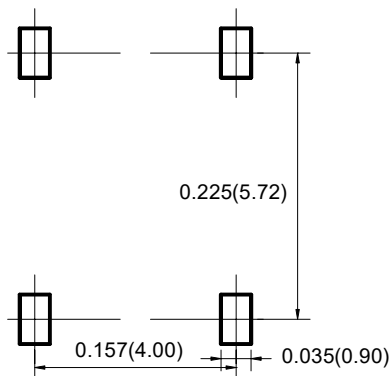
Fig. 5 Typical Reverse Characteristics

ABS Package Outline Dimensions



Dimensions in inches and (millimeters)

ABS Suggested Pad Layout



Note:

1. Controlling dimension: in millimeters.
2. General tolerance: ± 0.05 mm.
3. The pad layout is for reference purposes only.

Reel Taping Specifications For Surface Mount Devices-ABS

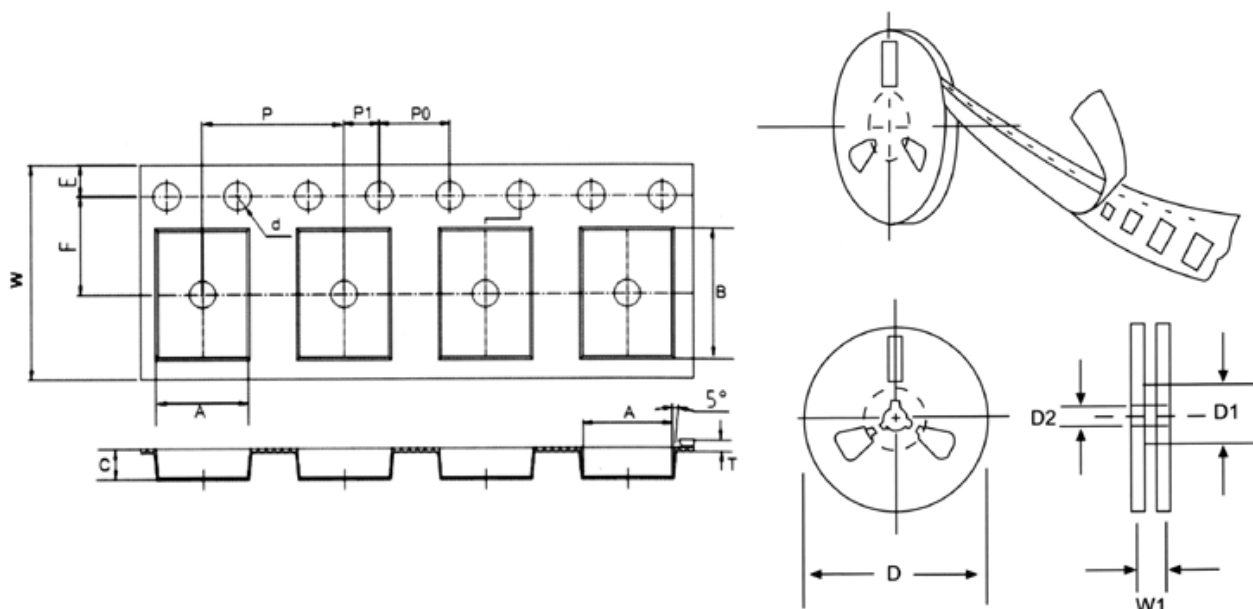


FIG: CONFIGURATION OF SURFACE MOUNTED DEVICES TAPING

ITEM	SYMBOL	ABS mm(inch)
Carrier width	A	5.40+0.1(0.213+0.004)
Carrier length	B	6.90+0.05(0.272+0.002)
Carrier depth	C	2.10+0.1(0.083+0.004)
Sprocket hole	d	1.55±0.05(0.061±0.002)
Reel outside diameter	D	279±2.0 (11± 0.079)
Reel inner diameter	D1	75 ±1.0 (2.95 ±0.039)
Feed hole diameter	D2	13+0.5(0.512+0.020)
Sprocket hole position	E	1.75+0.1(0.069+0.004)
Punch hole position	F	5.5+0.05(0.217+0.002)
Punch hole pitch	P	8.0+0.1(0.315+0.004)
Sprocket hole pitch	P0	4.0+0.1(0.157+0.004)
Embossment center	P1	2.0+0.1(0.079+0.004)
Totall tape thickness	T	0.10-0.70(0.004-0.028)
Tape width	W	12.0+0.3/-0.1(0.472+0.004)
Reel width	W1	16.8+2.0(0.661+0.079)

NOTE: Devices are packde in accordance with EIA standard RS-481-A and specification given above.