

# ABS Plastic-Encapsulate Bridge Rectifier

## 2.0A SURFACE MOUNT SCHOTTKY BARRIER BRIDGE RECTIFIER

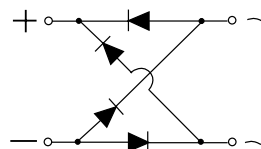
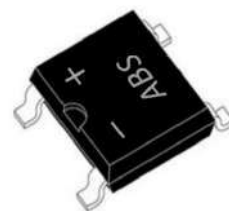
### Features

- Schottky Barrier Chip
- Ideally Suited for Automatic Assembly
- Low Power Loss, High Efficiency
- High Surge Current Capability
- For Use in Low Voltage Application
- Plastic Case Material has UL Flammability Classification Rating 94V-O

### Mechanical Data

- Case: SOPA-4, ABS, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Case
- Mounting Position: Any
- Marking: Type Number
- Lead Free: For RoHS / Lead Free Version**

ABS



### Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

Characteristic	Symbol	KABS 22	KABS 23	KABS 24	KABS 25	KABS 26	KABS 28	KABS 210	KABS 215	KABS 220	KABS 225	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V <sub>RRM</sub> V <sub>RWM</sub> V <sub>R</sub>	20	30	40	50	60	80	100	150	200	250	V
RMS Reverse Voltage	V <sub>R(RMS)</sub>	14	21	28	35	42	56	70	105	140	175	V
Average Rectified Output Current @T <sub>L</sub> = 90°C	I <sub>o</sub>	2.0										A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I <sub>FSM</sub>	60										A
Forward Voltage @I <sub>F</sub> 0A	V <sub>FM</sub>	0.50		0.70		0.85		0.90		0.98		V
Peak Reverse Current @T <sub>A</sub> = 25°C At Rated DC Blocking Voltage @T <sub>A</sub> = 100°C	I <sub>RM</sub>	0.1 20										mA
Typical Thermal Resistance (Note 1)	R <sub>θJL</sub> R <sub>θJA</sub>	10 50										°C/W
Typical Junction Capacitance	C <sub>j</sub>	110					30		110			pF
Operating Temperature Range	T <sub>j</sub>	-65 to +150										°C
Storage Temperature Range	T <sub>STG</sub>	-65 to +150										°C

Note: 1. Mounted on P.C. Board with 5.0mm<sup>2</sup> copper pad area.

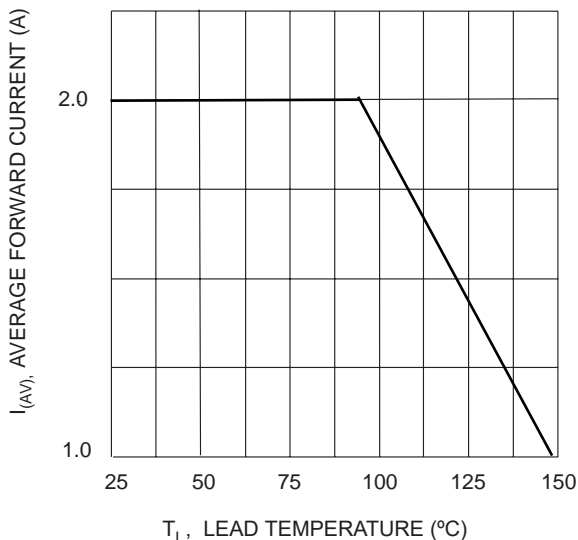


Fig. 1 Forward Current Derating Curve

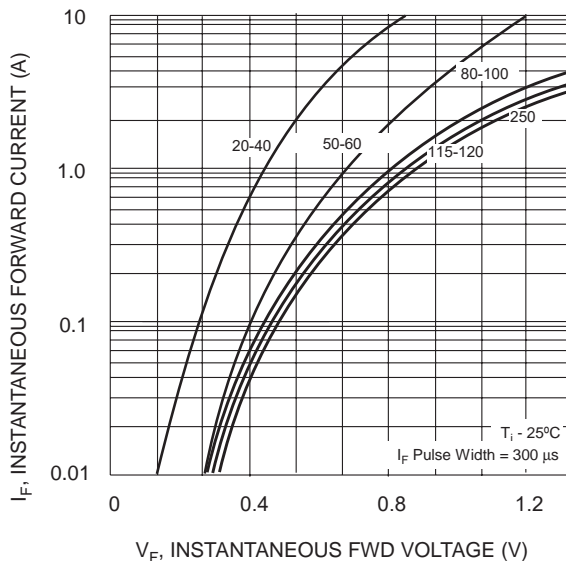


Fig. 2 Typ. Forward Characteristics

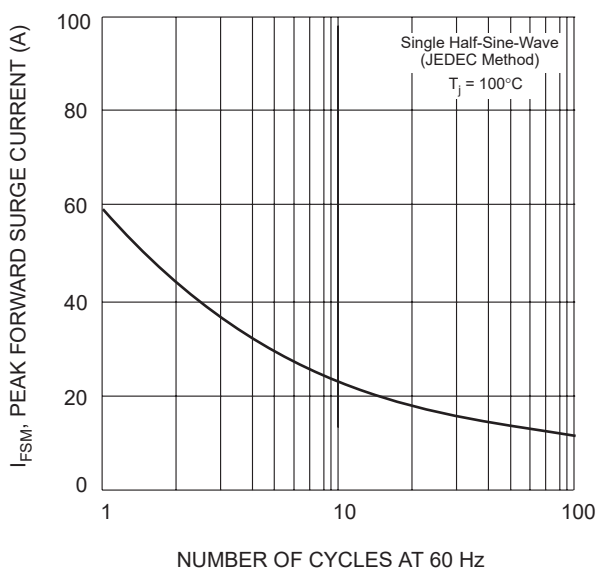


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

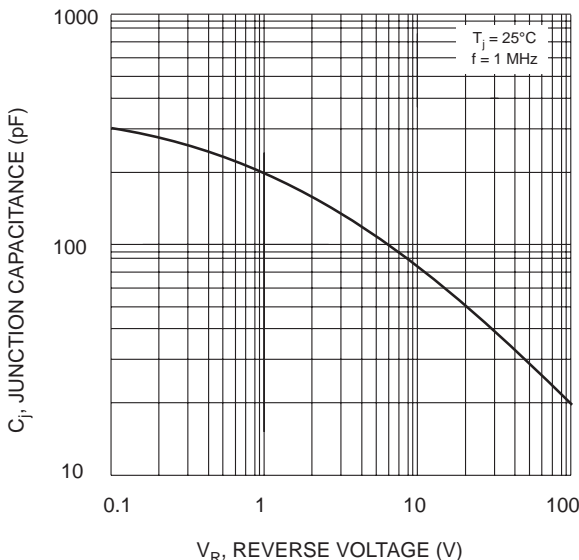


Fig. 4 Typical Junction Capacitance

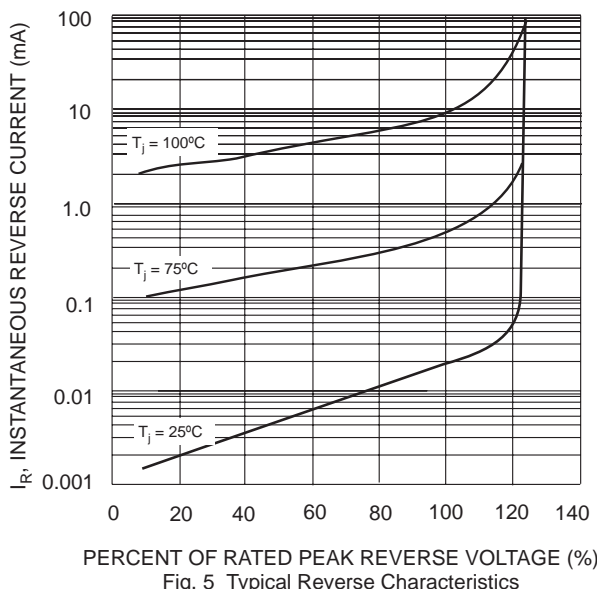
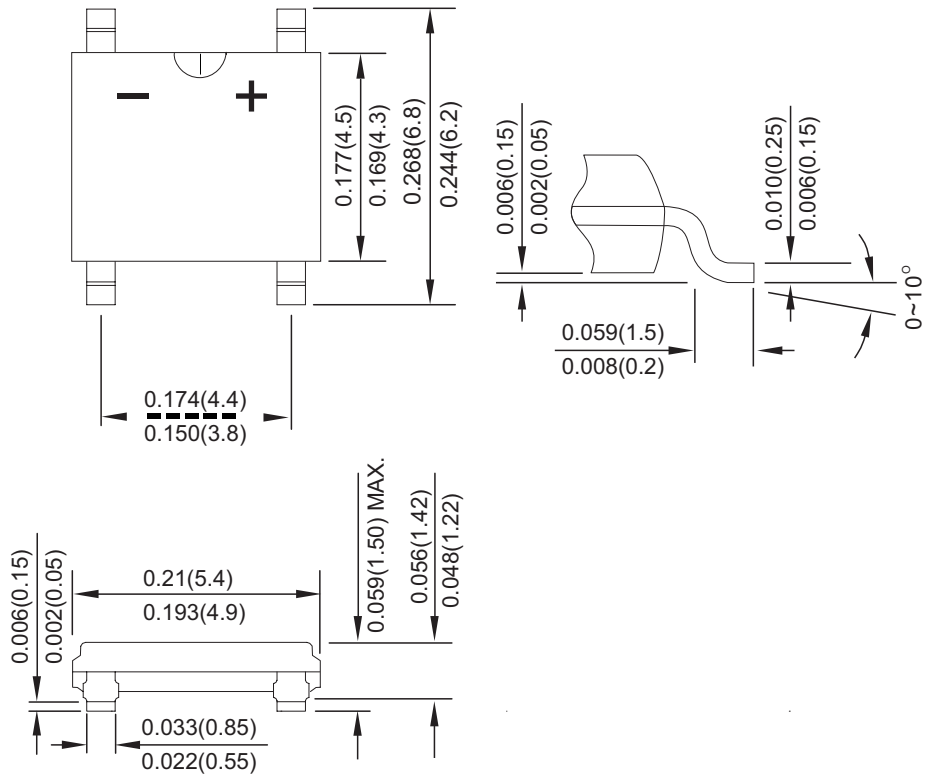


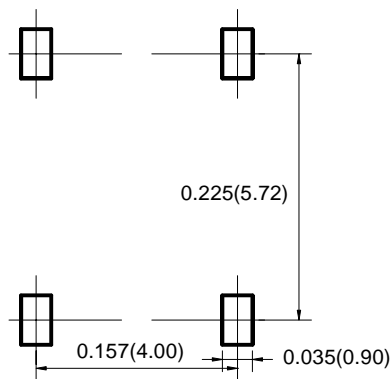
Fig. 5 Typical Reverse Characteristics

**ABS Package Outline Dimensions**



Dimensions in inches and (millimeters)

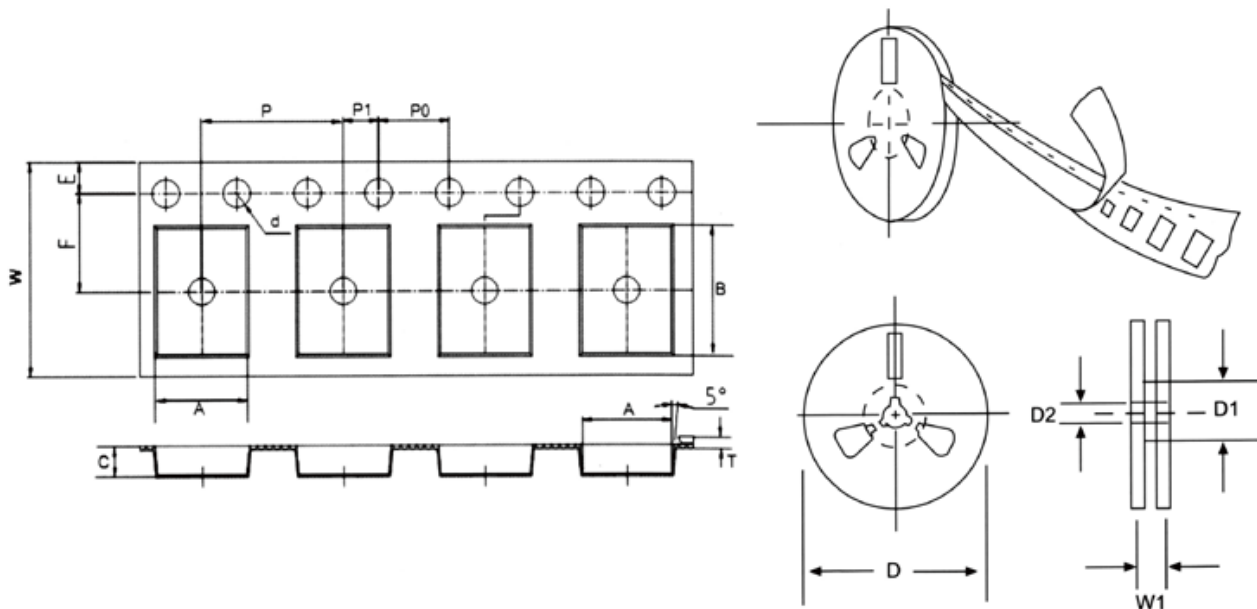
**ABS Suggested Pad Layout**



**Note:**

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05\text{mm}$ .
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.