

## General Purpose Bridge Rectifier

### Features

- $I_{F(AV)}$  1A
- $V_{RRM}$  50V-1000V
- High surge current capability
- Glass passivated chip

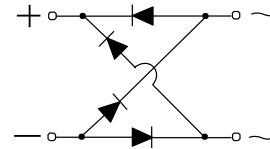
### Applications

- General purpose 1 phase Bridge rectifier applications

### Marking

- ABSX  
X : From 02 To 10

ABS



### Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	ABS				
				2	4	6	8	10
Repetitive Peak Reverse Voltage	$V_{RRM}$	V		200	400	600	800	1000
Maximum RMS Voltage	$V_{RMS}$	V		140	280	420	560	700
Average Rectified Output Current	$I_O$	A	60Hz sine wave, R-load, $T_a=50^\circ\text{C}$	On alumina substrate		1.0		
Surge(Non-repetitive)Forward Current	$I_{FSM}$	A	8.3ms sine wave, 1 cycle, $T_j=25^\circ\text{C}$		35			
			1.0ms sine wave, 1 cycle, $T_j=25^\circ\text{C}$		70			
Current Squared Time	$i^2t$	$\text{A}^2\text{S}$	$1\text{ms} \leq t < 8.3\text{ms}$ $T_j=25^\circ\text{C}$ , Rating of per diode		5			
Operation Junction and Storage Temperature Range	$T_j, T_{stg}$	$^\circ\text{C}$			-55 ~ +150			

### Electrical Characteristics ( $T=25^\circ\text{C}$ Unless otherwise specified)

Item	Symbol	Unit	Test Condition	Max
Peak Forward Voltage	$V_{FM}$	V	$I_{FM}=1.0\text{A}$ , Pulse measurement, Rating of per diode	0.98
Peak Reverse Current	$I_{RRM}$	$\mu\text{A}$	$V_{RM}=V_{RRM}$ , Pulse measurement, Rating of per diode	10
Thermal Resistance	$R_{\theta J-A}$	$^\circ\text{C}/\text{W}$	Between junction and ambient, On alumina substrate	62.5
	$R_{\theta J-L}$		Between junction and lead	25
	$R_{\theta J-C}$		Between junction and case	25

FIG.1: FORWARD CURRENT DERATING CURVE

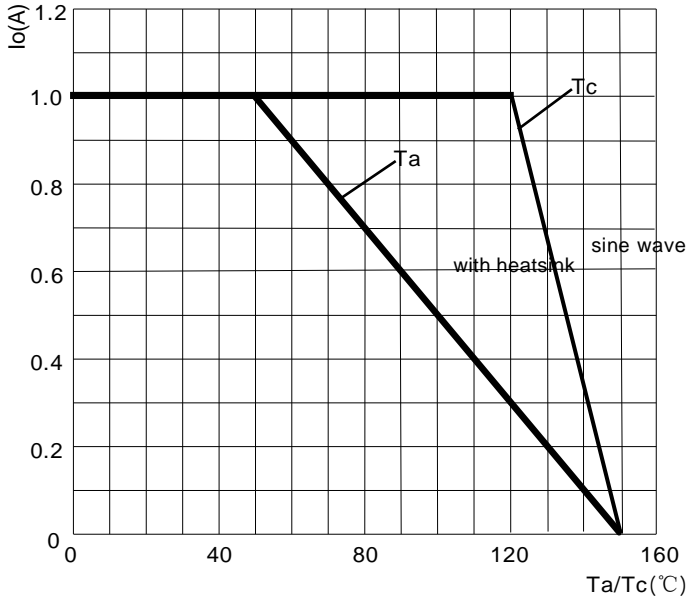


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

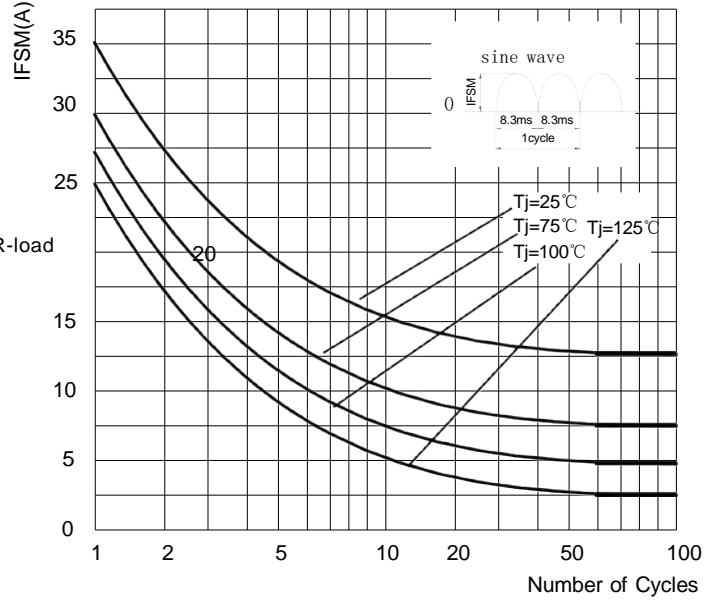


FIG.3: TYPICAL FORWARD CHARACTERISTICS

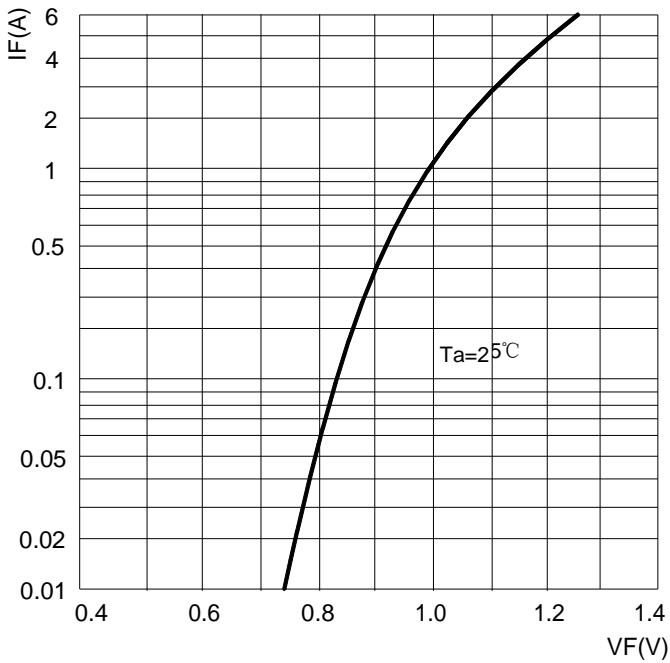
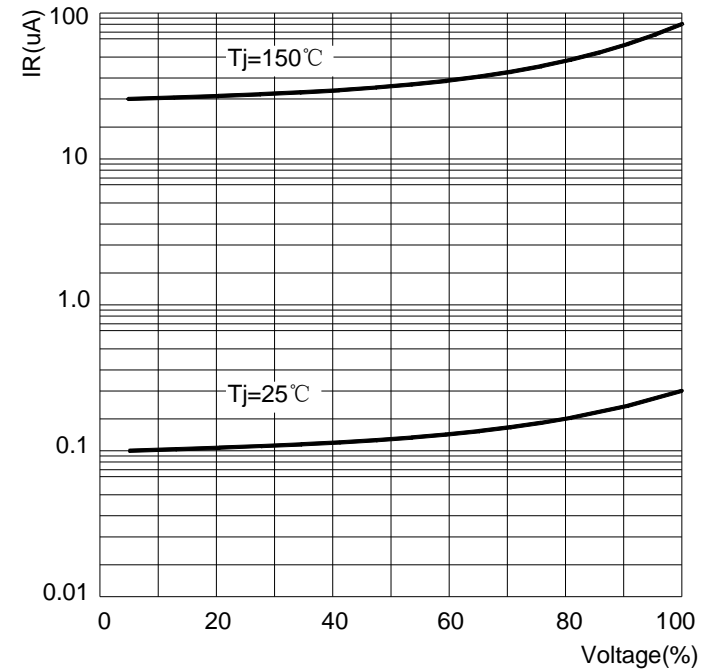
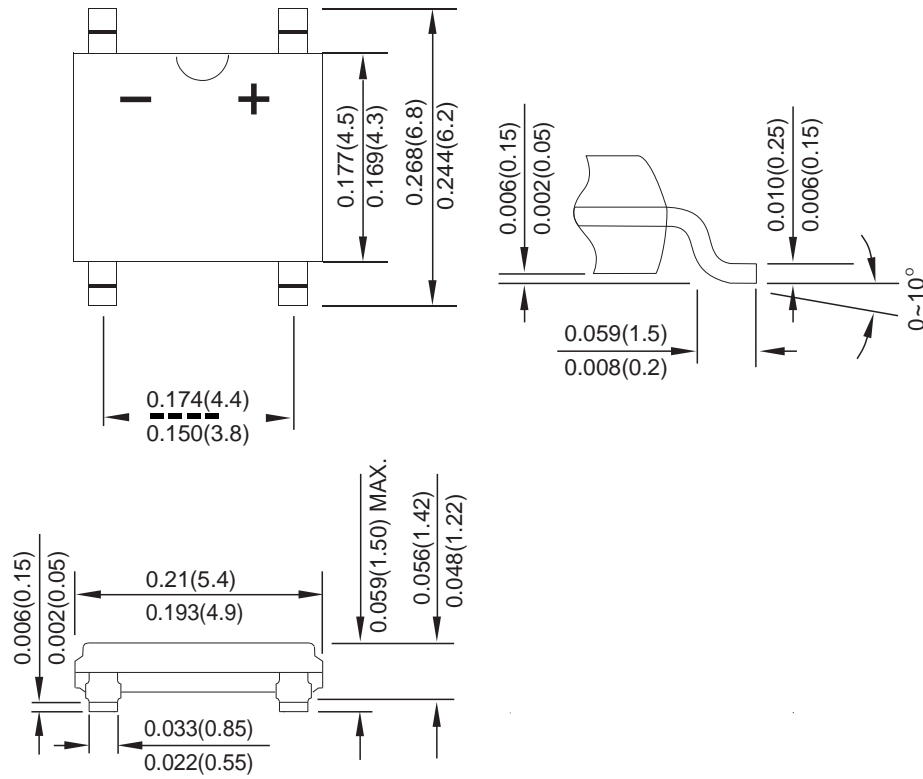


FIG.4: TYPICAL REVERSE CHARACTERISTICS

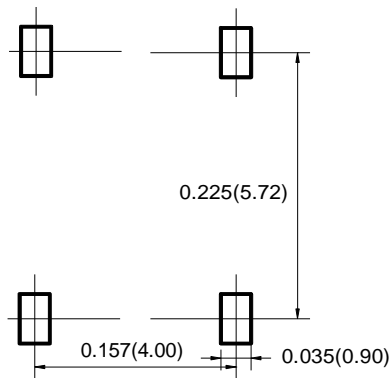


**Package Outline Dimensions**



Dimensions in inches and (millimeters)

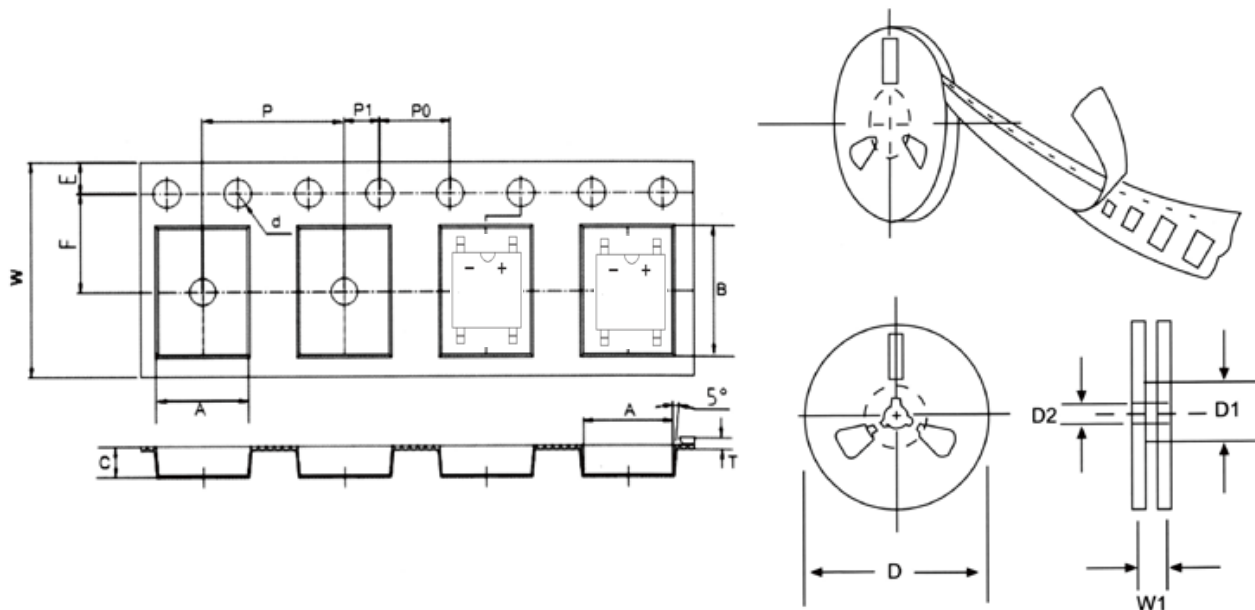
**ABS Suggested Pad Layout**



**Note:**

1. Controlling dimension: in millimeters.
2. General tolerance:  $\pm 0.05$ 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	<b>279±2.0 (11±0.079)</b>
Reel inner diameter	D1	<b>75 ±1.0 (2.95 ±0.039)</b>
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)
Total 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 packed in accordance with EIA standard RS-481-A and specification given above.