

## ABS Plastic-Encapsulate Bridge Rectifier

### Features

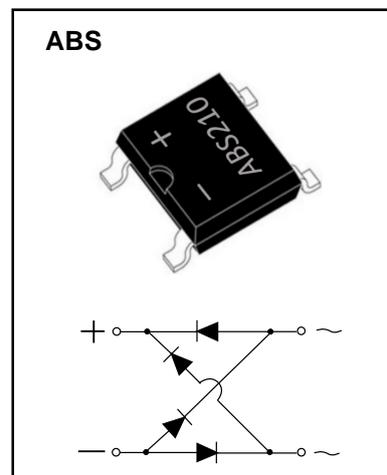
- $I_o$  2A
- $V_{RRM}$  50V-1000V
- High surge current capability
- Glass passivated chip
- Polarity: Color band denotes cathode

### Applications

- General purpose 1 phase Bridge rectifier applications

### Marking

- ABS2X
- X : From 02 To 10



### Limiting Values (Absolute Maximum Rating)

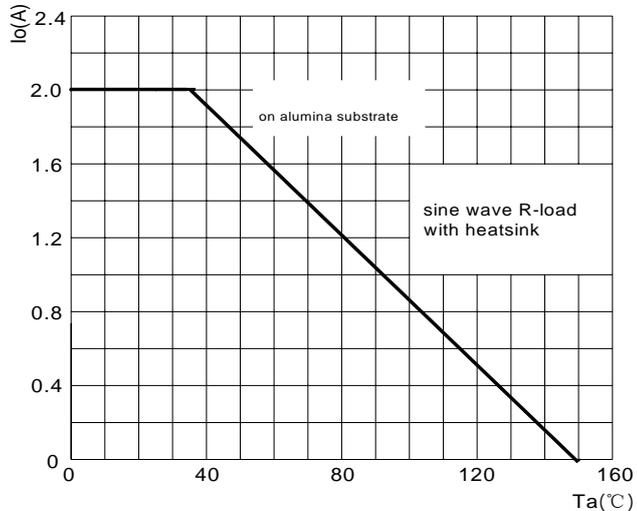
Item	Symbol	Unit	Conditions	ABS				
				202	204	206	208	210
Repetitive Peak Reverse Voltage	$V_{RRM}$	V		200	400	600	800	1000
Maximum RMS Voltage	$V_{RMS}$	V		140	280	420	560	700
Average Rectified Output Current	$I_o$	A	60Hz sine wave, R-load, $T_a=35^\circ\text{C}$	On alumina substrate		2.0		
Surge(Non-repetitive)Forward Current	$I_{FSM}$	A	60Hz sine wave, 1 cycle, $T_j=25^\circ\text{C}$		60			
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		14.94			
Storage Temperature	$T_{stg}$	$^\circ\text{C}$	-55 ~+150					
Junction Temperature	$T_j$	$^\circ\text{C}$	-55 ~+150					

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

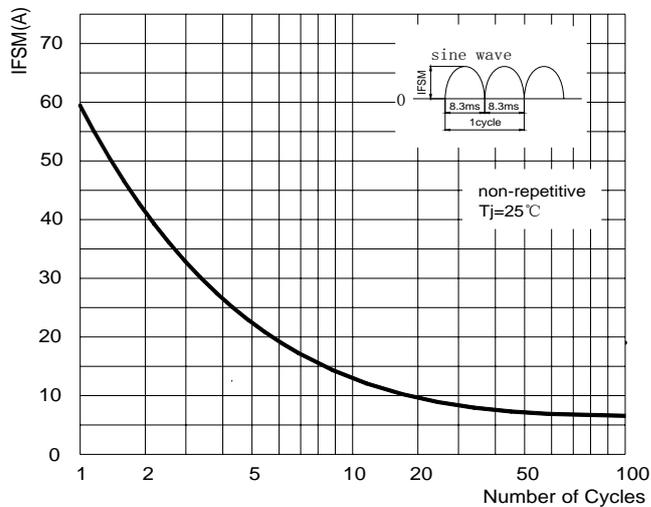
Item	Symbol	Unit	Test Condition	Max
Peak Forward Voltage	$V_{FM}$	V	$I_{FM}=2.0\text{A}$ , Pulse measurement, Rating of per diode	1.1
Peak Reverse Current	$I_{RRM}$	$\mu\text{A}$	$V_{RM}=V_{RRM}$ , Pulse measurement, Rating of per diode	5
Thermal Resistance	$R_{\theta J-A}$	$^\circ\text{C}/\text{W}$	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

# Typical Characteristics

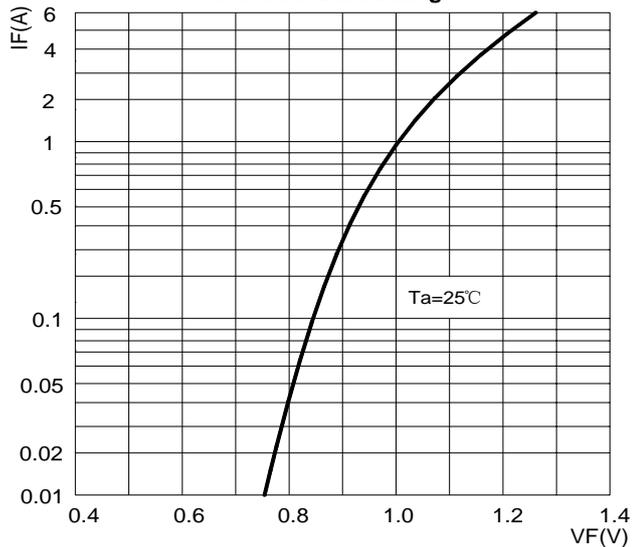
**FIG1:  $I_o$ - $T_a$  Curve**



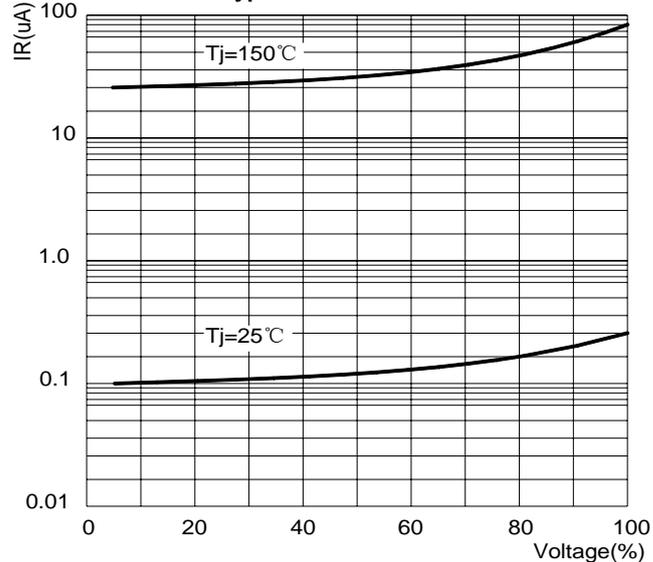
**FIG2: Surge Forward Current Capacity**



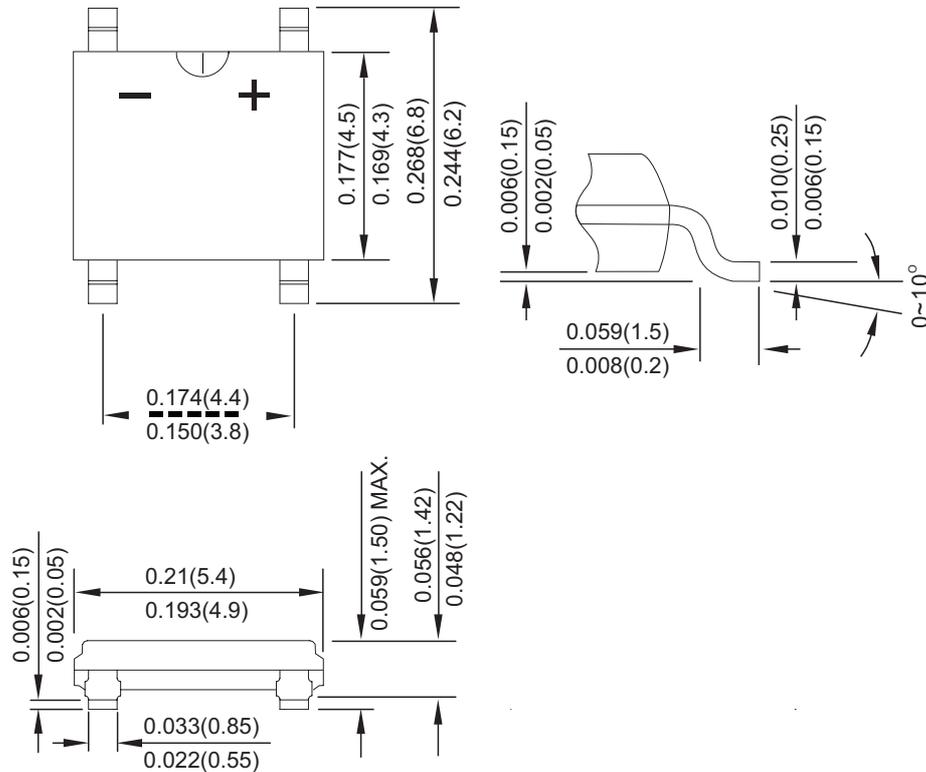
**FIG3: Forward Voltage**



**FIG4: Typical Reverse Characteristics**

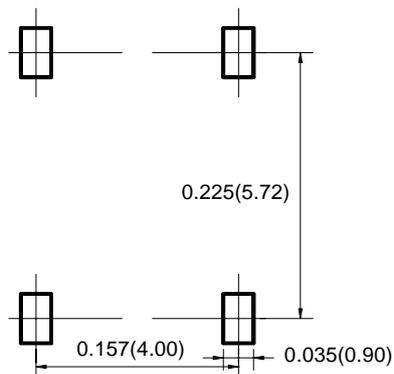


## ABS Package Outline Dimensions



Dimensions in inches and (millimeters)

## ABS Suggested Pad Layout



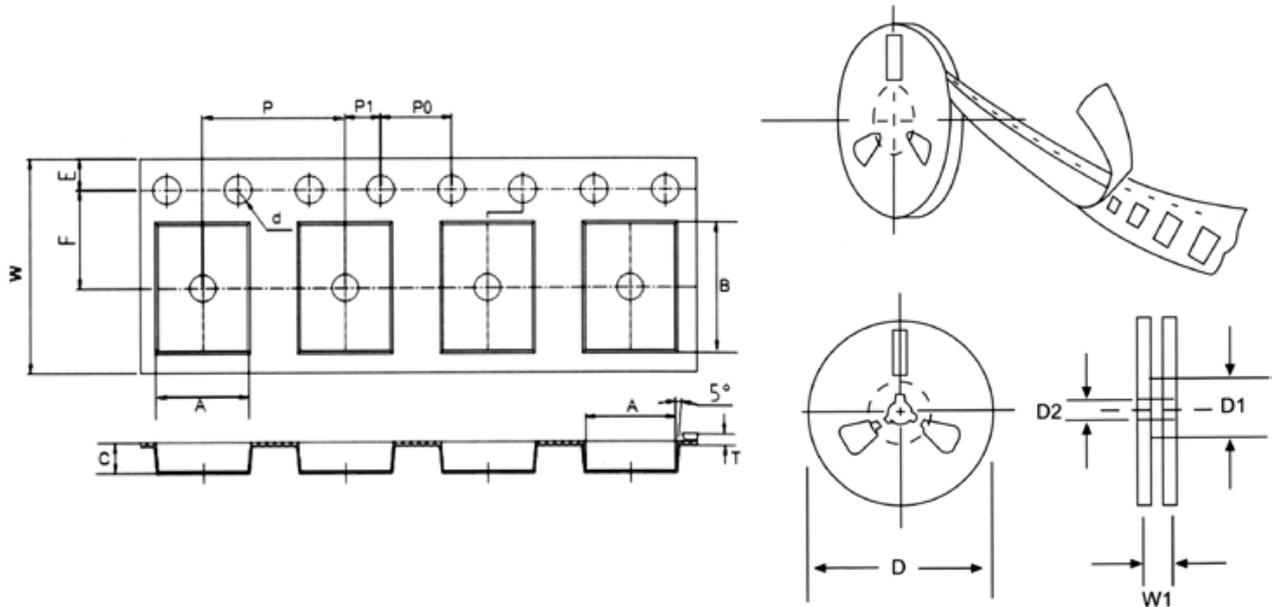
**Note:**

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

**NOTICE**

JSHD reserve the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSHD does not assume any liability arising out of the application or use of any product described herein.

# Reel Taping Specifications For Surface Mount Devices-ABS



**FIG:CONFIGURATION OF AXIAL 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	1.50+0.1/-0(0.059+0.004/-0)
Reel outside diameter	D	330/281+2.0(13/11+0.279)
Reel inner diameter	D1	8.0+0.2(0.315+0.008)
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.