

ABS Plastic-Encapsulate Bridge Rectifier

ABS2 THRU ABS10 General Purpose Bridge Rectifier

Features

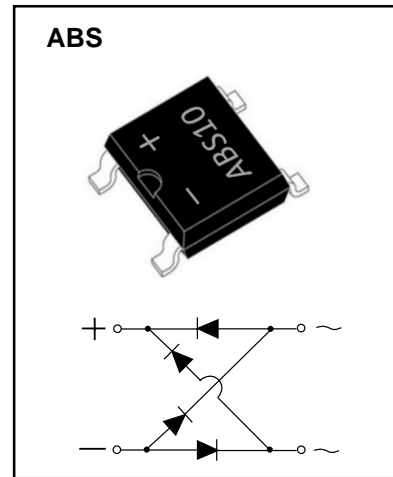
- $I_{F(AV)}$ 1A
- V_{RRM} 50V-1000V
- High surge current capability
- Glass passivated chip

Applications

- General purpose 1 phase Bridge rectifier applications

Marking

- ABSX
X : From 02 To 10



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	A^2S	$1\text{ms} \leq t < 8.3\text{ms}$ $T_j=25^\circ\text{C}$, Rating of per diode	5				
Operation Junction and Storage Temperature Range	T_j, T_{stg}	$^\circ\text{C}$		-55 ~ +150				

Electrical Characteristics (T=25°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}	μA	$V_{RM}=V_{RRM}$, 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
Typical junction capacitance	C_J	pF	Measured at 1.0MHz and applied reverse voltage of 4.0 volts.	13

Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

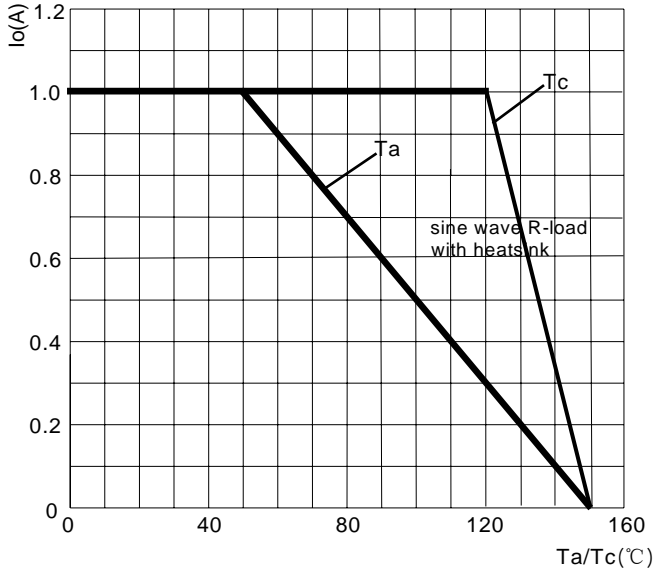


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

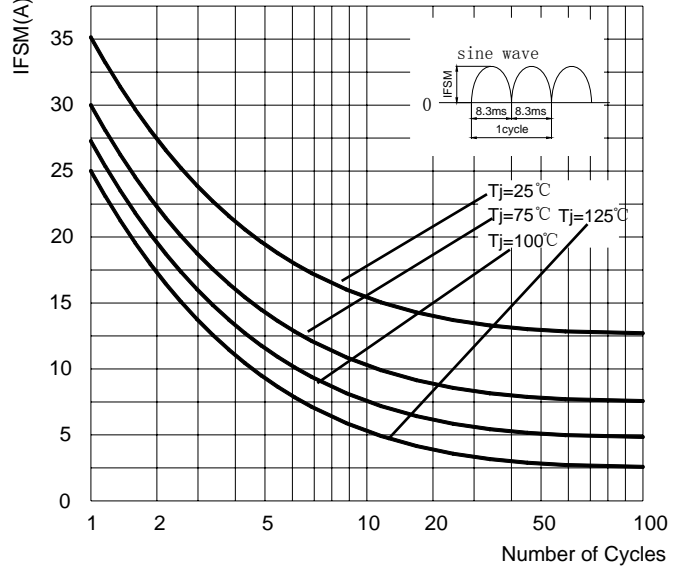


FIG.3: TYPICAL FORWARD CHARACTERISTICS

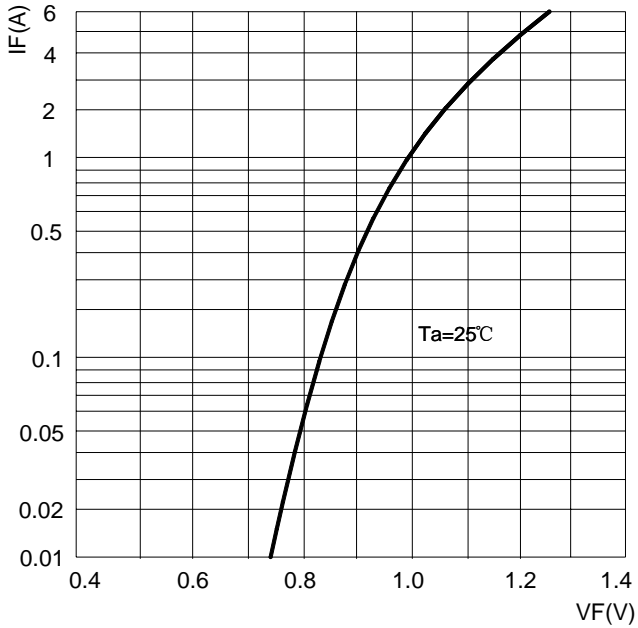


FIG.4: TYPICAL REVERSE CHARACTERISTICS

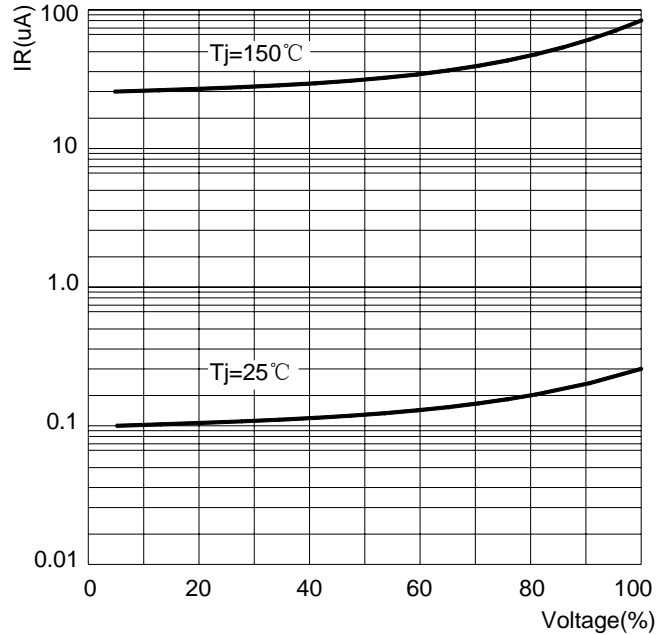
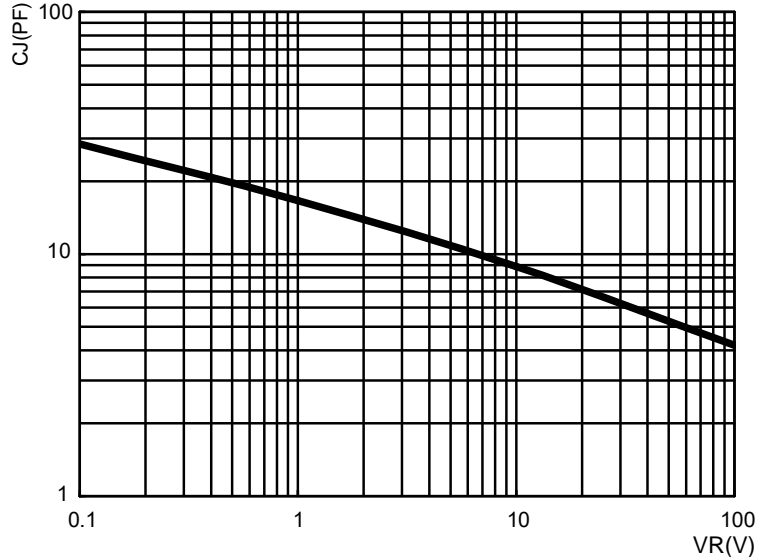
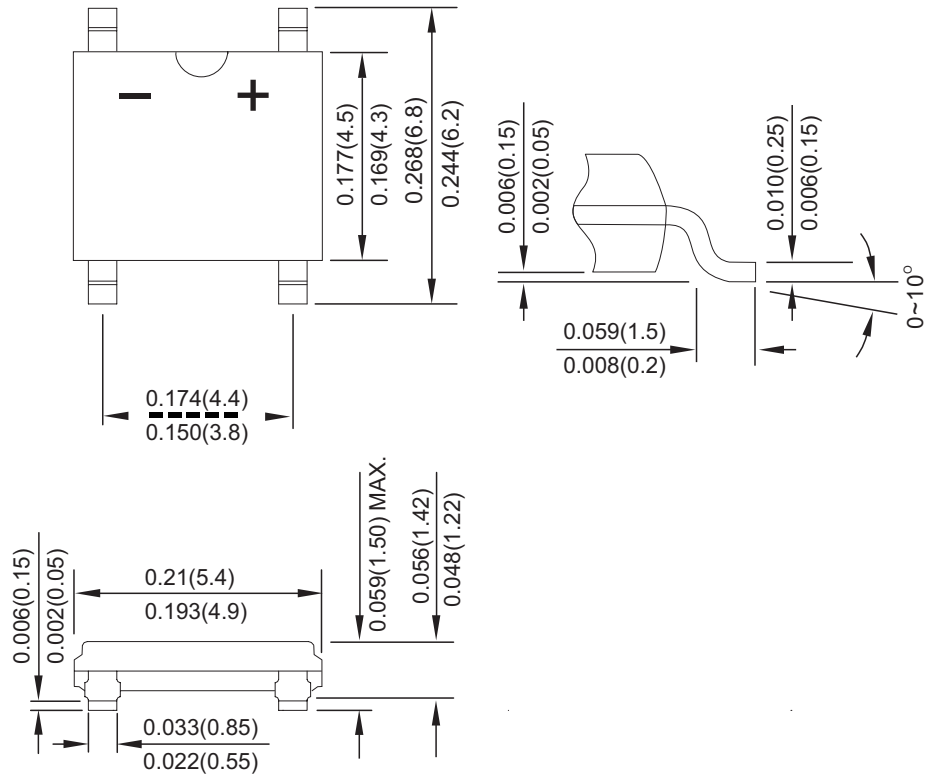


FIG.5: TYPICAL JUNCTION CAPACITANCE

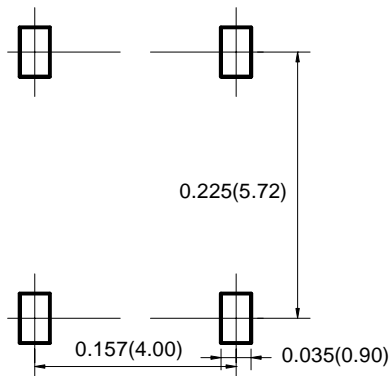


ABS Package Outline Dimensions



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.

NOTICE

JSCJ reserves the right to make modifications, enhancements, improvements, corrections or other changes without further notice to any product herein. JSCJ 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

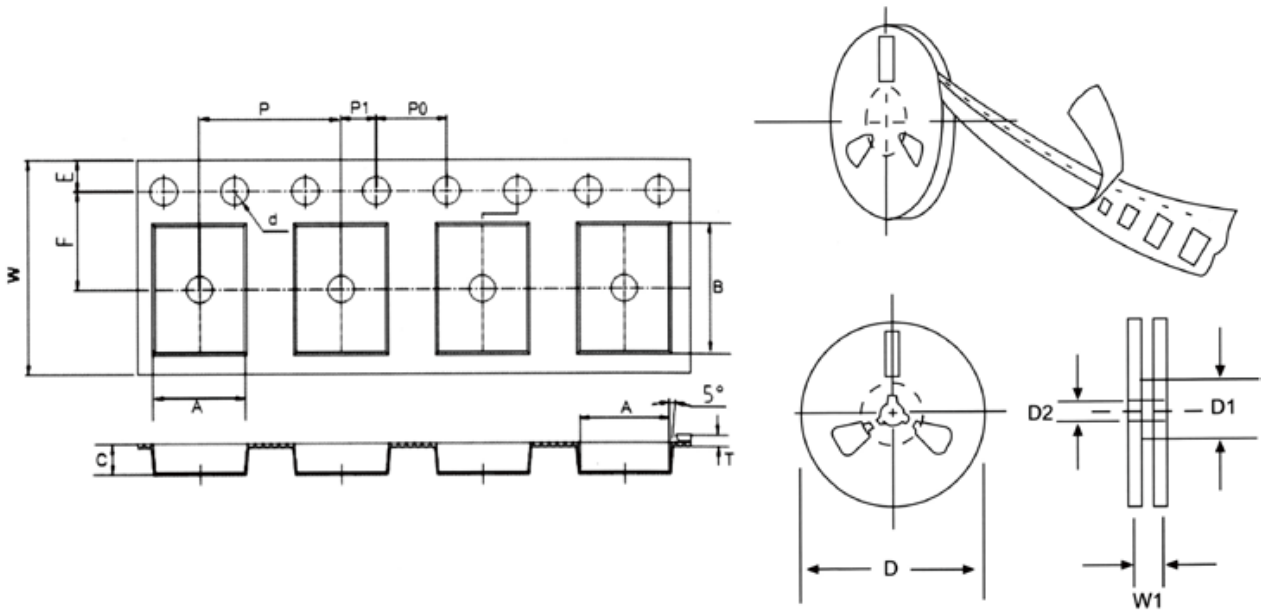


FIG: CONFIGURATION OF SURFACE MOUNTED DEVICES TAPING

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)
Strocket 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.