

ABS Plastic-Encapsulate Bridge Rectifier

General Purpose Bridge Rectifier

Features

- $I_{F(AV)}$ 3A
- V_{RRM} 200V-1000V
- High surge current capability
- Glass passivated 70mil chip

Applications

- General purpose 1 phase Bridge rectifier applications

Marking

- ABS3XX
- X : From 02. To 10.

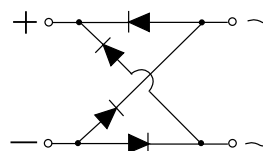
Limiting Values (Absolute Maximum Rating)

Item	Symbol	Unit	Conditions	ABS				
				302	304	306	308	310
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, $T_a=115^{\circ}C$ On alumina substrate	3.0				
Surge(Non-repetitive)Forward Current	I_{FSM}	A	8.3ms sine wave, 1 cycle, $T_j=25^{\circ}C$	80				
			1.0ms sine wave, 1 cycle, $T_j=25^{\circ}C$	130				
Current Squared Time	I^2t	A^2S	$1ms \leq t < 8.3ms$ $T_j=25^{\circ}C$, Rating of per diode	14.94				
Operation Junction and Storage Temperature Range	T_J, T_{stg}	$^{\circ}C$		-55 ~+150				

Electrical Characteristics (T=25°C Unless otherwise specified)

Item	Symbol	Unit	Test Condition	Max
Peak Forward Voltage	V_{FM}	V	$I_{FM}=3.0A$, Pulse measurement, Rating of per diode	1.00
Peak Reverse Current	I_{RRM}	μA	$V_{RM}=V_{RRM}$, Pulse measurement, Rating of per diode	5
Thermal Resistance	$R_{\theta J-A}$	$^{\circ}C/W$	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

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Typical Characteristics

FIG.1: FORWARD CURRENT DERATING CURVE

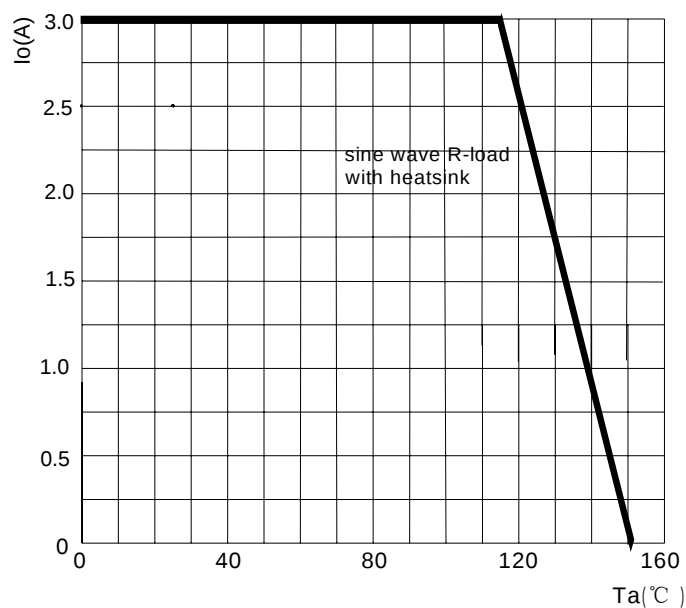


FIG.2: MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

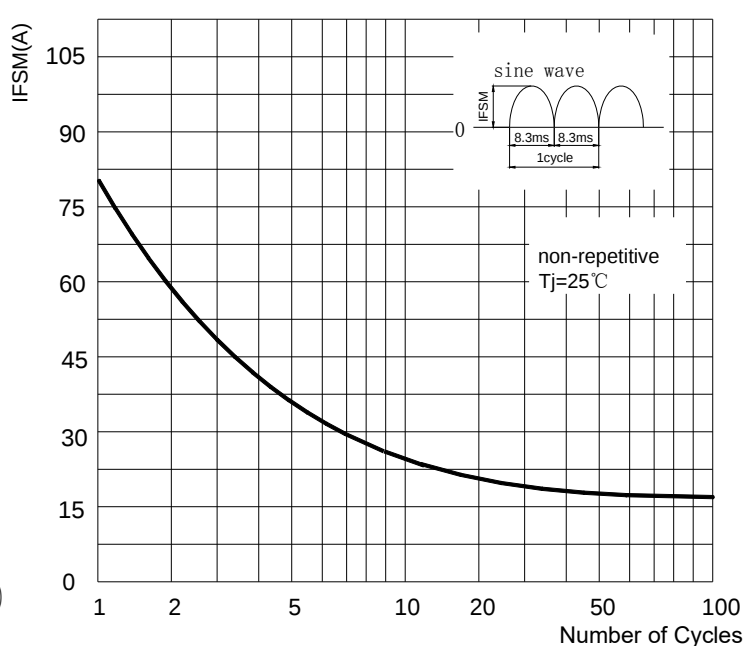


FIG.3: TYPICAL FORWARD CHARACTERISTICS

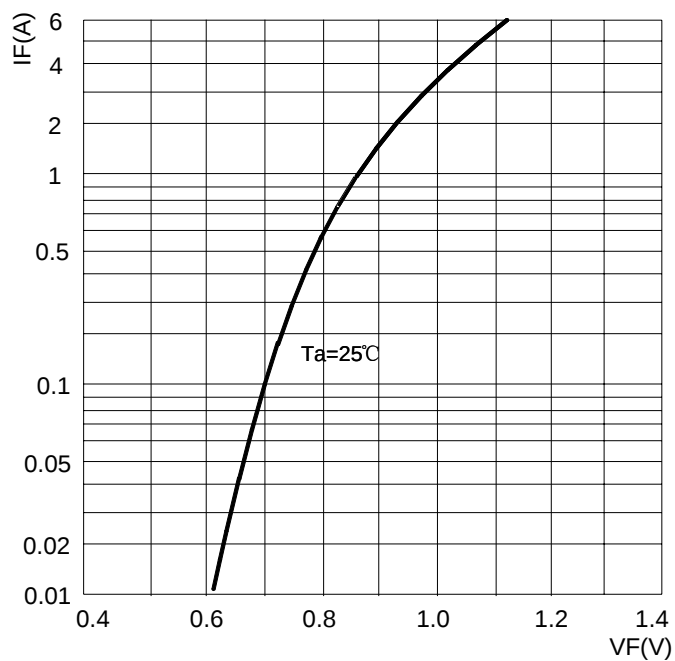
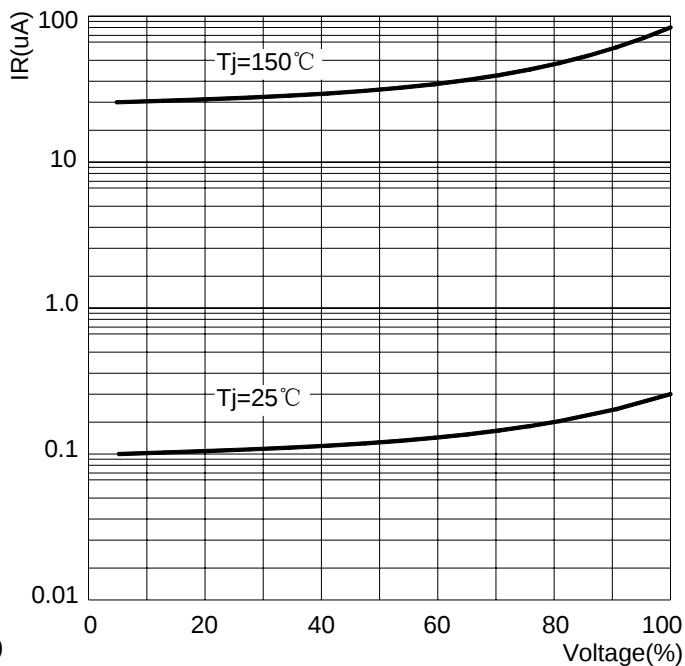
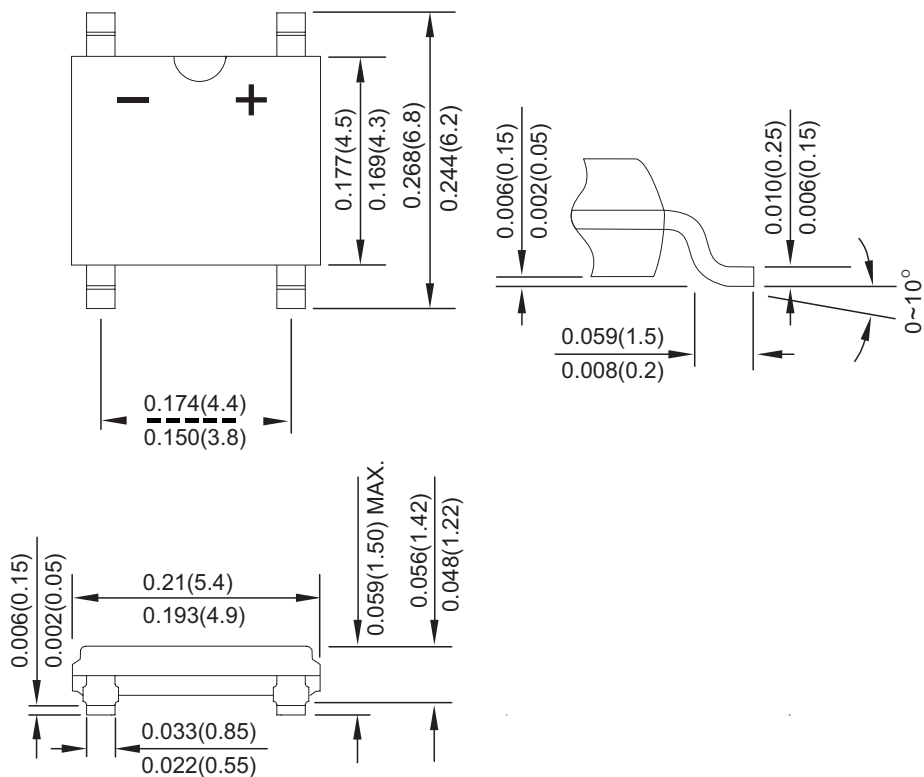


FIG.4: TYPICAL REVERSE CHARACTERISTICS

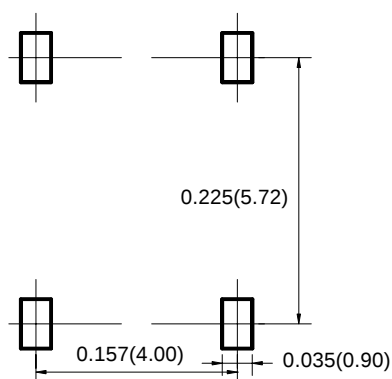


ABS Package Outline Dimensions



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.

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