

FEATURES

| The Plastic Material Used Carries Underwriters Laboratory

Flammability Recognition 94V-0

| Surge overload ratings to 30 amperes

| Ideal For Printed Circuit Board Application



MECHANICAL DATA

| Case: Molded Plastic

| Terminals: Plated Leads Solderable Per MIL-STD-202, Method 208

| Polarity: Marked On Body

| Mounting Position: Any

APPROVALS

RoHS | Compliance with 2011/65/EU

MAXIMUM RATINGS AND CHARACTERISTICS ($T_A=25^\circ\text{C}$)

Parameter	Symbol	ABS05	ABS1	ABS2	ABS4	ABS6	ABS8	ABS10	Unit
Marking		ABS05	ABS1	ABS2	ABS4	ABS6	ABS8	ABS10	
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	
Maximum RMS Bridge Input Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	
Maximum Average Forward Rectified Output Current At $T_A=40^\circ\text{C}$	$I_{F(AV)}$					1.0			
Peak Forward Surge Current Single Sine-wave Superimposed On Rated Load (Jedec Method)	I_{FSM}					30			A
Maximum Instantaneous Forward Voltage Drop Per Leg at 1.0A	V_F					1.1			V
Maximum DC Reverse Current at Rated DC Blocking Voltage Per Element	$T_A=25^\circ\text{C}$	I_R				10			
	$T_A=125^\circ\text{C}$					500			μA
Typical Thermal Resistance Per Element (1)	$R_{\theta,JA}$					80			$^\circ\text{C}/\text{W}$
Rating For Fusing ($t<8.3\text{ms}$)	I^2t					4.0			A^2sec
Operating Junction and Storage Temperature Range	T_J, T_{STG}					-55 to +150			$^\circ\text{C}$

Notes: (1)Thermal Resistance From Junction to Ambient on P.C.board Mounting.

CHARACTERISTIC CURVES

Fig. 1- Derating Curve for Output Rectified Current

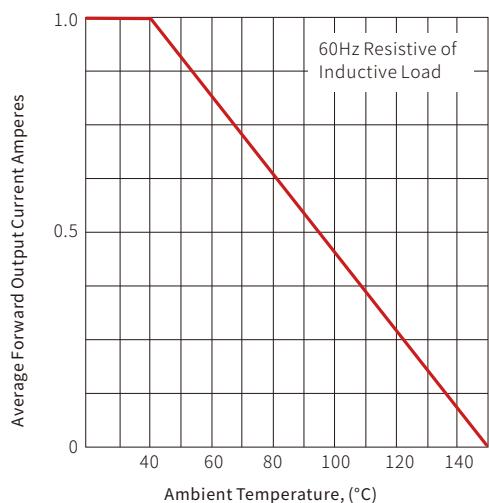


Fig. 2-Maximum Non-Repetitive Peak Forward Surge Current



Fig. 3-Typical Instantaneous Forward Characteristics

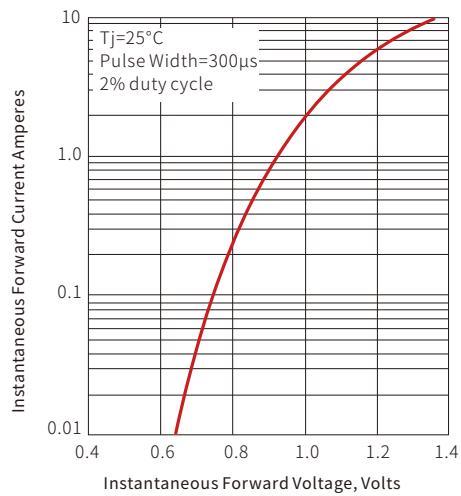


Fig. 4-Typical Reverse Characteristics

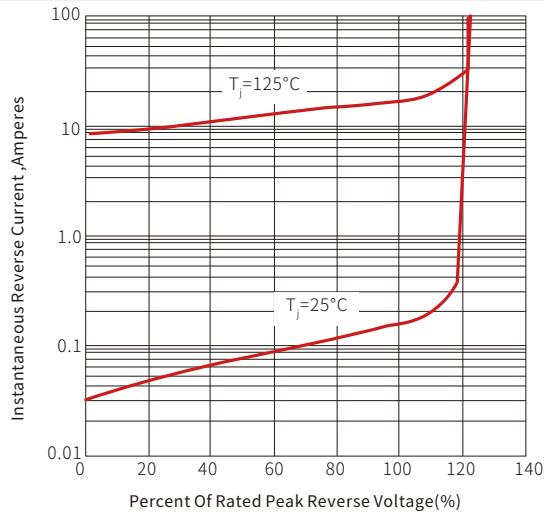
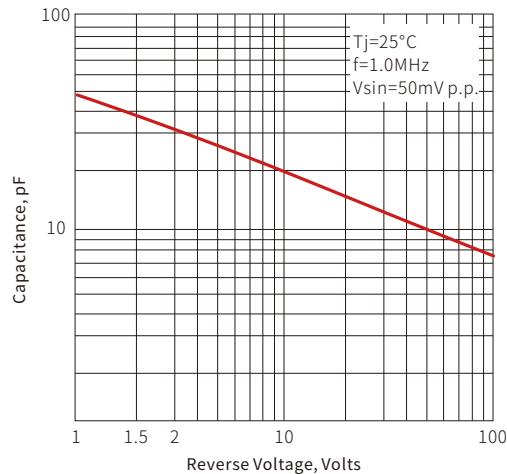
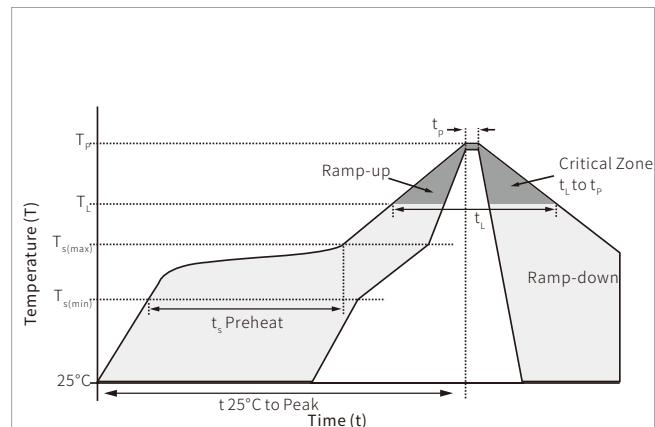


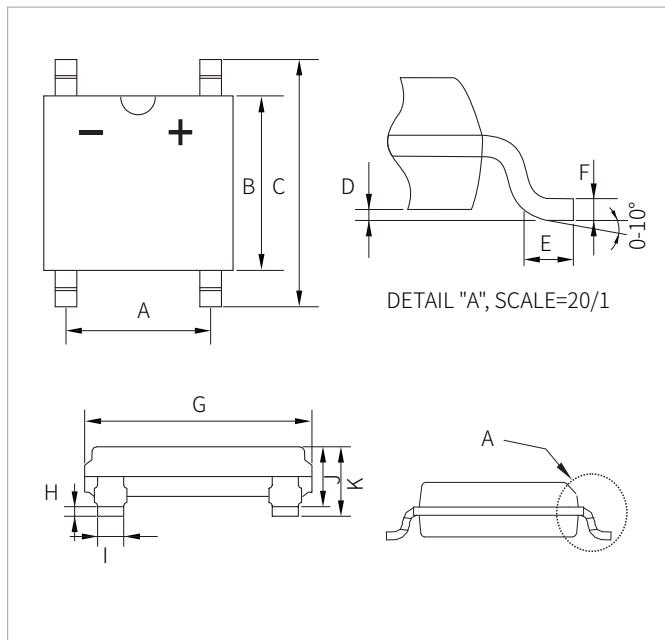
Fig. 5-Typical Junction Capacitance


SOLDERING PARAMETERS

Reflow Condition		Lead-free assembly
Pre Heat	Temperature Max ($T_{s(min)}$)	150°C
	Temperature Max ($T_{s(max)}$)	200°C
	Time (min to max) (t_s)	60 – 180 secs
Average ramp up rate (Liquidus Temp (T_L) to peak		3°C/second max
$T_{s(max)}$ to T_L - Ramp-up Rate		3°C/second max
Reflow	Temperature (T_L) (Liquidus)	217°C
	Time (min to max) (t_L)	60 – 150 seconds
Peak Temperature (T_p)		260°C
Time within 5°C of actual peak Temperature (t_p)		20 – 40 seconds
Ramp-down Rate		6°C/second max
Time 25°C to peak Temperature (T_p)		8 minutes max.
Do not exceed		260°C



ABS PACKAGE INFORMATION



Ref.	Millimeters		Inches	
	Min.	Max.	Min.	Max.
A	3.80	4.40	0.150	0.174
B	4.30	4.50	0.169	0.177
C	6.20	6.80	0.244	0.268
D	0.05	0.15	0.002	0.006
E	0.20	1.50	0.008	0.059
F	0.15	0.25	0.006	0.010
G	4.90	5.40	0.193	0.210
H	0.05	0.15	0.002	0.006
I	0.55	0.85	0.022	0.033
J	1.22	1.42	0.048	0.056
K	1.50Max.		0.059Max.	

ORDERING INFORMATION

Part Number	Component Package	QTY/Reel	Reel Size
ABS05-ABS10	ABS	5000PCS	13"

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By QR Code

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