

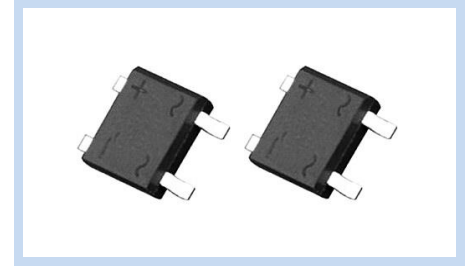
# Single-Phase Bridge Rectifier 1A 200~1KV 4-SMD

ABS12~ABS110

MERITEK

## FEATURE

- Glass Passivated Bridge Rectifier
- Low Forward Voltage Drop
- Compact Construction Design
- High surge current capability
- Plated lead solderable per MIL-STD 202, method 208
- SOPA-4, Molded Plastic ABS



## ELECTRICAL CHARACTERISTICS

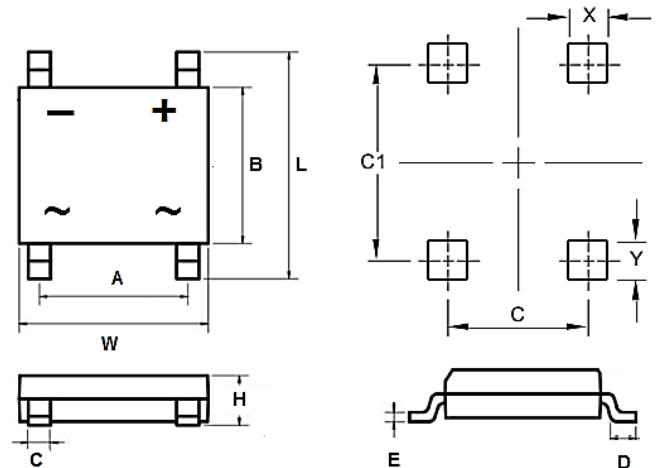
Parameter		Symbols	ABS12	ABS14	ABS16	ABS18	ABS110	Unit
Maximum Recercent Peak Reverse Voltage		$V_{RRM}$	200	400	600	800	1000	V
Maximum RMS Voltage		$V_{RMS}$	140	280	420	560	700	V
Maximum DC Blocking Voltage		$V_{DC}$	200	400	600	800	1000	V
Maximum Average Forward Rectified Current On Aluminum substract		$I_{p(av)}$	1.0					A
Peak Forward Surge Current, 8.3ms single half sine wave superimposed on rated load		$I_{FSM}$	30.0					A
Rating for fusing ( $t < 8.3ms$ )		$I^2T$	3.7					A <sup>2</sup> S
Maximum Instantaneous Forward Voltage		$V_F$	1.05 at 0.8A DC					V
Max Reverse Current at Rated Block DC Voltage	$T_A=25^{\circ}C$	$I_R$	5.0					$\mu A$
	$T_A=125^{\circ}C$		500					$\mu A$
Thermal Resistance	Junction to lead	$R_{th(JL)}$	25.0					$^{\circ}C/W$
	Aluminum substrate	$R_{th(JA)}$	80.0					$^{\circ}C/W$
Operating Junction and Storage Temperature		$T_J, T_{stg}$	-55 to +150					$^{\circ}C$

Note:

1. Rating at 25°C, ambient temperature unless otherwise specified.
2. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

## DIMENSIONS

Item	4-SMD	
	Min (mm)	Max (mm)
W	4.80	5.30
H	1.20	1.50
L	6.00	7.00
A	3.70	4.20
B	4.20	4.60
C	0.50	0.80
D	0.30	0.80
E	0.15	0.25
C	-	4.00 ref
C1	-	5.60 ref
X	-	0.85 ref
Y	-	0.85 ref



## RATINGS AND CHARACTERISTICS CURVES

Fig.1-Forward Current Derating Curve

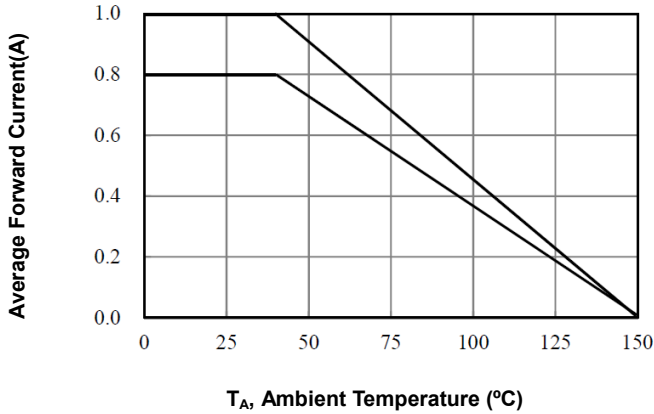


Fig.2-Typical Instantaneous Forward Characteristics

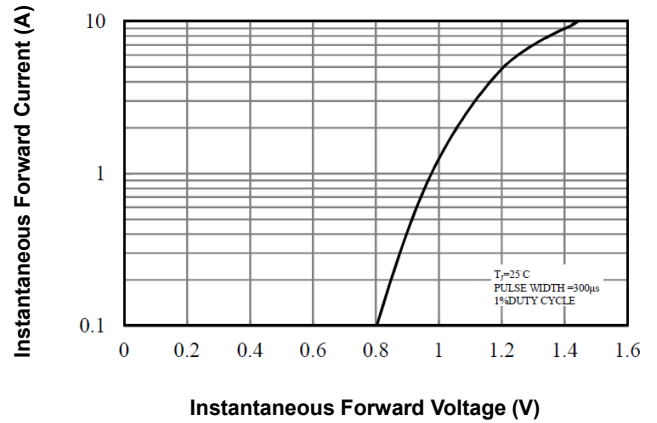


Fig 3. Typical Reverse Characteristics

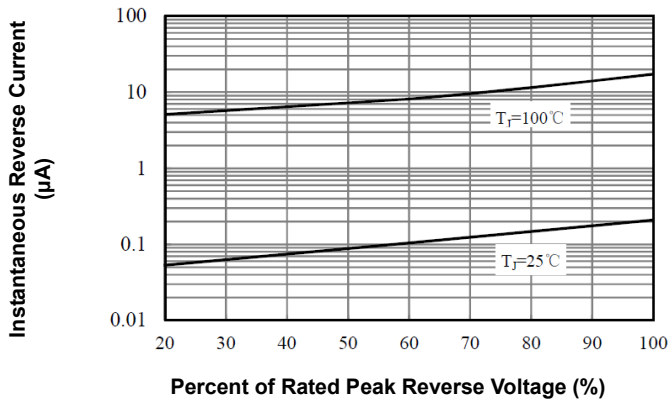
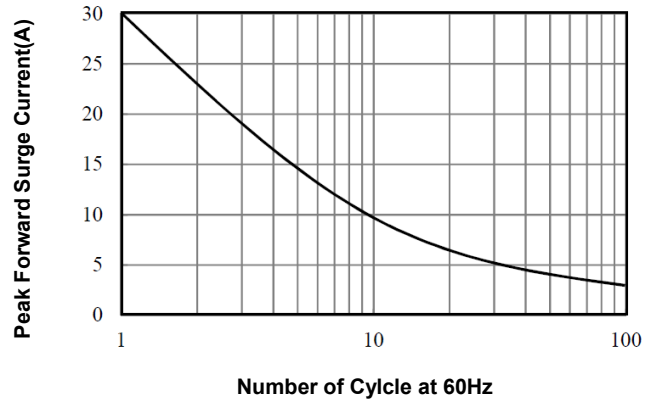


Fig 4. Maximum Non-Repetitive Surge Current



\*Specifications subject to change without notice.