ABS151 THRU ABS1510

Single Phase 1.5AMP Surface Mount Glass Passivated Bridge Rectifier

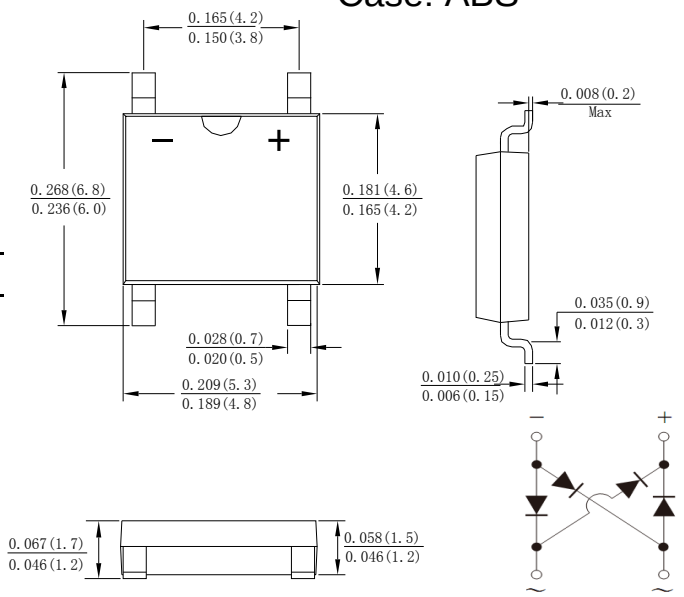
Features

- Glass passivated die construction
- Low forward voltage drop
- High current capability
- High surge current capability
- Designed for surface mount application
- Plastic material-UL flammability 94V-0

Mechanical Data

- Case: SOPA-4, molded plastic ABS
- Terminals: plated leads solderable per MIL-STD-202, Method 208
- Polarity: as marked on case
- Mounting position: Any
- Marking: type number

Case: ABS



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

Rating at 25℃ ambient temperature unless otherwise specified.
Single Phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%.

TYPE NUMBER	SYMBOL	ABS151	ABS152	ABS154	ABS156	ABS158	ABS1510	UNITS
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_{DC}	100	200	400	600	800	1000	V
RMS Reverse Voltage	V_{RMS}	70	140	280	420	560	700	V
Average Rectified Output Current (Note:1) @T_C =100℃	IF(AV)	1.5						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50						A
I^2t Rating for Fusing (t < 8.3ms)	I^2t	10.375						A^2s
Forward Voltage per element @IF=0.75A @IF=1.5A	V_{FM}	0.95 1.0						V
Peak Reverse Current @T_J=25℃ At Rated DC Blocking Voltage @T_J=125℃	I_R	5.0 100						uA
Typical Junction Capacitance (Note2)	C_J	20						pF
Typical Thermal Resistance	$R_{\theta JA}$ $R_{\theta JL}$	62.5 25						℃/W
Operating and Storage Temperature Range	T_J,T_{STG}	-55to+150						℃

Note:1. Mounted on glass epoxy PC board with 1.3mm^2 solder pad.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

Fig. 1 Output Current Derating Curve

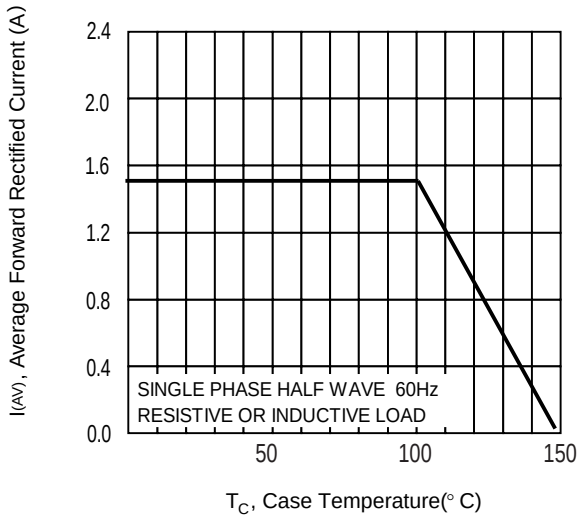


Fig. 2 Typical Forward Characteristics

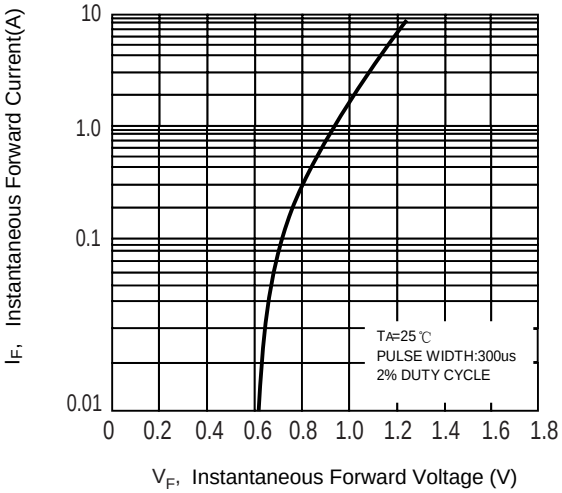


Fig.3 Maximum Peak Forward Surge Current

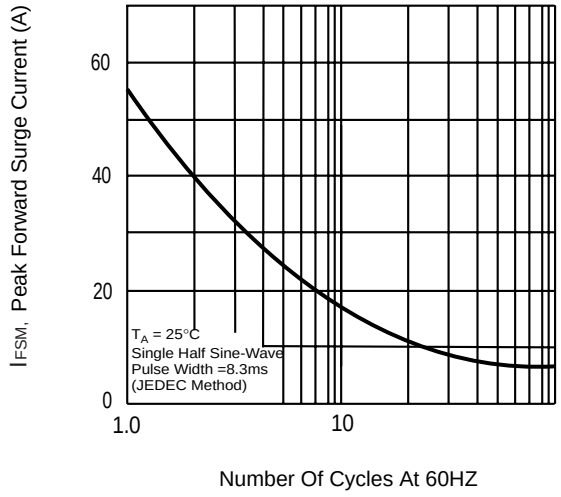


Fig.4 Typical Reverse Characteristics

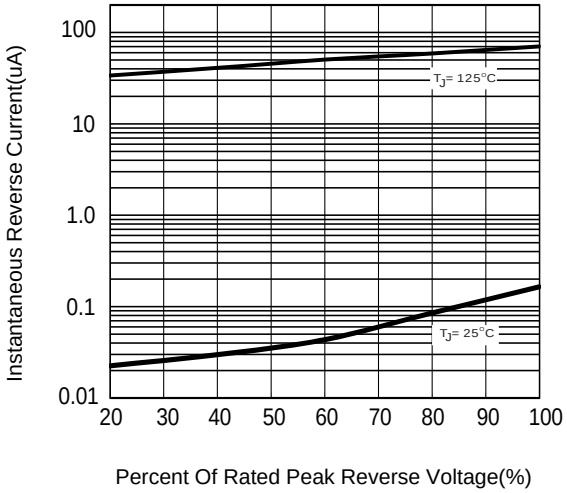


Fig. 5 Typical Junction Capacitance

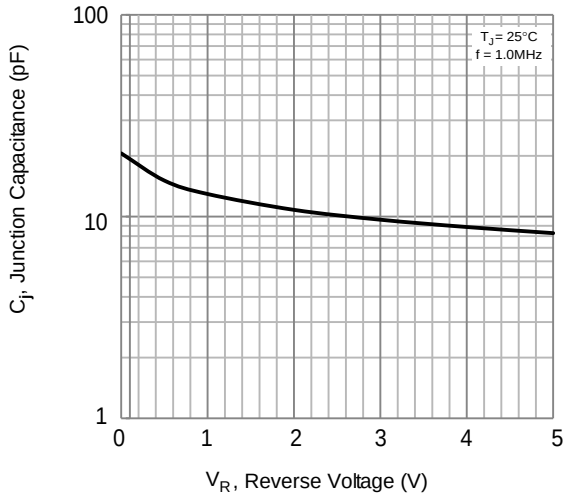
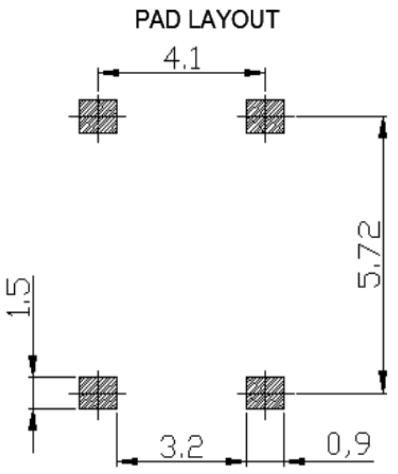


Fig.6 Mounting Pad Layout



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