



ABS2-ABS10

SURFACE MOUNT BRIDGE RECTIFIERS

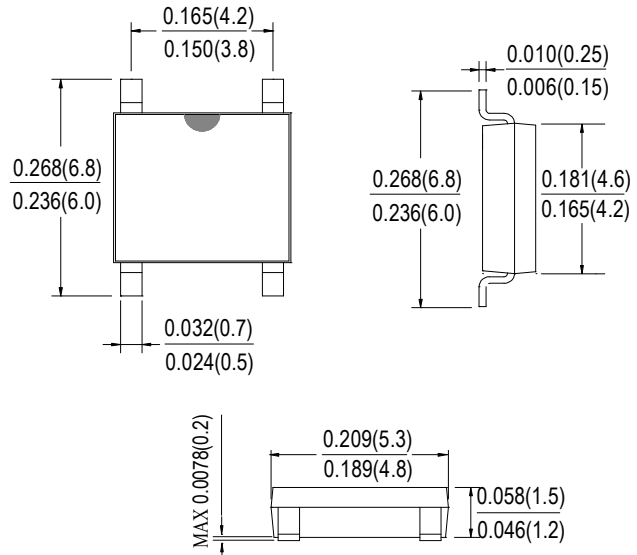
Features

- 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-O
- UL Recognized File # E476623

Mechanical Data

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

ABS



Dimensions in inches and (millimeters)

Maximum Ratings and Electrical Characteristics

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

TYPE NUMBER	SYMBOL	ABS2	ABS4	ABS6	ABS8	ABS10	UNITS
Peak Repetitive Reverse Voltage	V_{RRM}						V
Working Peak Reverse Voltage	V_{RWM}	200	400	600	800	1000	
DC Blocking Voltage	V_{DC}						
RMS Reverse Voltage	V_{RMS}	140	280	420	560	700	V
Average Rectified Output Current @ $T_c=100^\circ\text{C}$	$I_F(AV)$	1.0					A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	35					A
Rating for fusing ($t < 8.3\text{ms}$)	I^2t	5.08					A^2s
Forward Voltage per element @ $I_F=0.5\text{A}$ @ $I_F=1.0\text{A}$	V_{FM}	0.95 1.0					V
Peak Reverse Current @ $T_A=25^\circ\text{C}$ At Rated DC Blocking Voltage @ $T_A=125^\circ\text{C}$	I_R	5.0 200					μA
Typical Thermal Resistance per leg (Note 1)	$R_{\theta JA}$	62.5					$^\circ\text{C}/\text{W}$
	$R_{\theta JL}$	25					
Operating and Storage Temperature Range	T_J, T_{STG}	-55to+150					$^\circ\text{C}$

Note:1.Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.



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Characteristic Curves ($T_A=25\text{ }^\circ\text{C}$ unless otherwise noted)

FIG.1 MAXIMUM FORWARD CURRENT DERATING CURVE

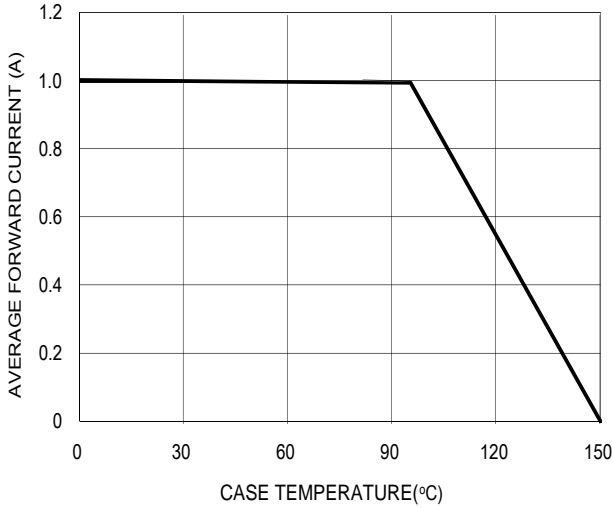


FIG. 2 TYPICAL FORWARD CHARACTERISTIC

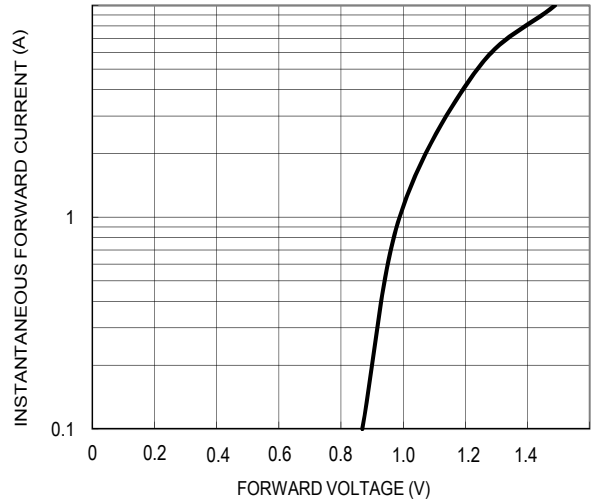


FIG.3 MAXIMUM NON-REMITIVE FORWARD SURGE CURRENT

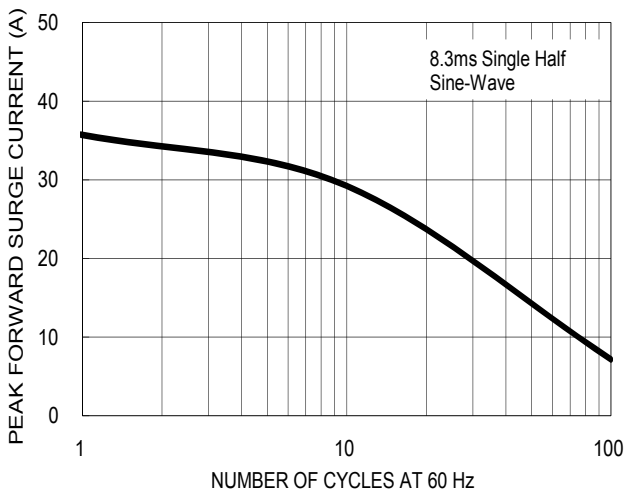
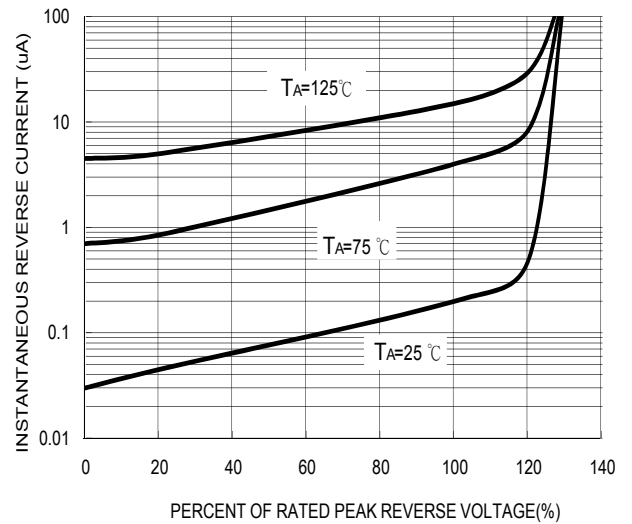


FIG. 4 TYPICAL REVERSE CHARACTERISTICS



ABS PAD LAYOUT

