

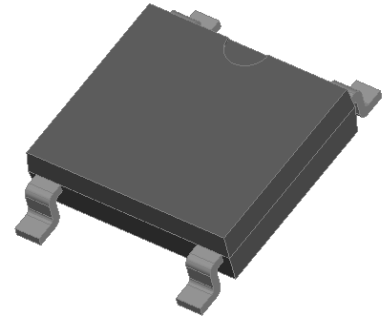
Bridge Rectifiers

Features

- UL recognition, file #E313149
- Ideal for automated placement
- High surge current capability
- Meets MSL level 1, per J peak of 260 °C

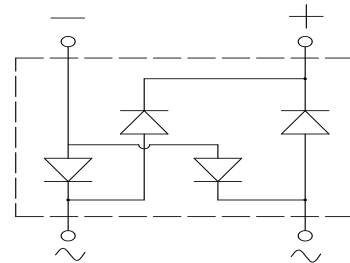
Typical Applications

General purpose use in AC/DC bridge full wave rectification for SMPS, lighting ballast, adapter, battery charger, home appliances, office equipment, and telecommunication applications.



Mechanical Data

- **Package:** ABS
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant, Halogen free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22 -B102
- **Polarity:** As marked on body



■ Maximum Ratings ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	ABS1502	ABS1504	ABS1506	ABS1508	ABS1510
Device marking code			ABS1502	ABS1504	ABS1506	ABS1508	ABS1510
Repetitive peak reverse voltage	VRRM	V	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load, $T_a=40^\circ\text{C}$, on Alumina Substrate	IO	A	1.5				
Surge(non-repetitive)forward current @60 Hz half sine wave, 1 cycle, $T_j=25^\circ\text{C}$	IFSM	A	40				
Current squared time @ $1\text{ms} \leq t < 8.3\text{ms}$ $T_j=25^\circ\text{C}$, Rating of per diode	I^2t	A^2s	6.6				
Storage temperature	Tstg	$^\circ\text{C}$	-55 ~+150				
Junction temperature	T_j	$^\circ\text{C}$	-55 ~+150				

■ Electrical Characteristics ($T_a=25^\circ\text{C}$ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	ABS1502	ABS1504	ABS1506	ABS1508	ABS1510
Maximum instantaneous forward voltage drop per diode	V_F	V	IFM=0.7A	0.95				
Maximum DC reverse current at rated DC blocking voltage per diode	IRRM	μA	VRM=VRRM	5				

■ Thermal Characteristics (T_a=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	ABS1502	ABS1504	ABS1506	ABS1508	ABS1510
Thermal Resistance	Between junction and ambient, On alumina substrate	R _{θJ-A}	°C/W	62.5				
	Between junction and lead	R _{θJ-L}		25.0				

■ Ordering Information (Example)

PREFERRED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
ABS1502-ABS1510	F1	Approximate 0.095	4000	8000	64000	13" reel

■ Characteristics (Typical)

FIG1: I_o-T_a Curve

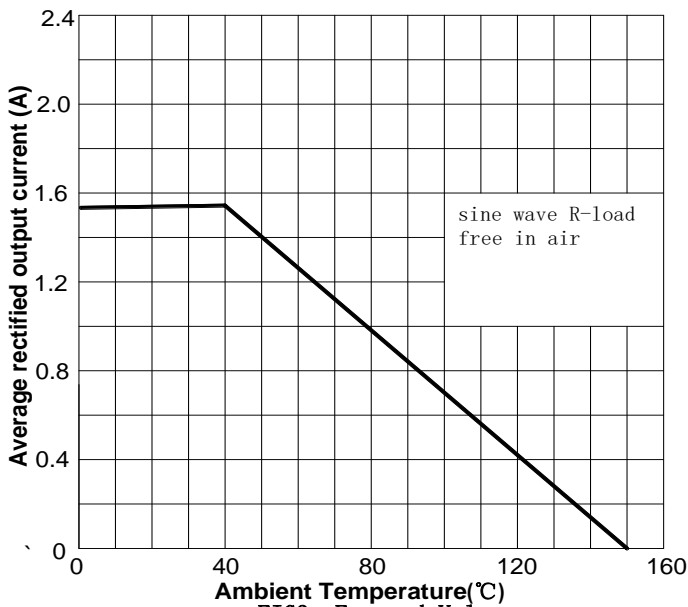


FIG2: Surge Forward Current Capability

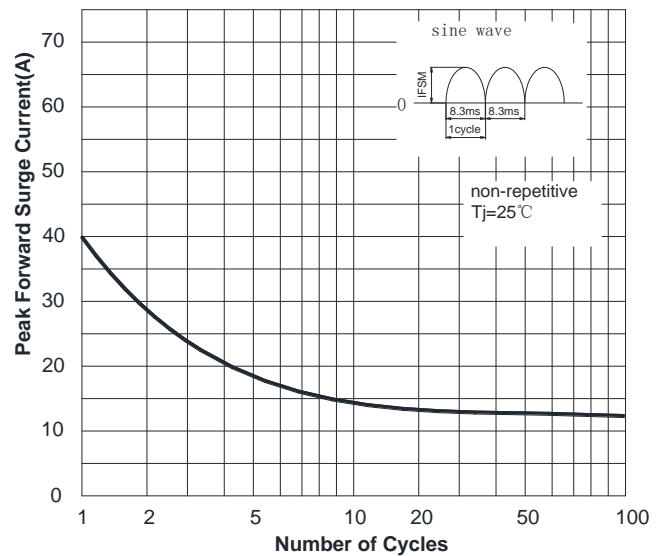


FIG3: Forward Voltage

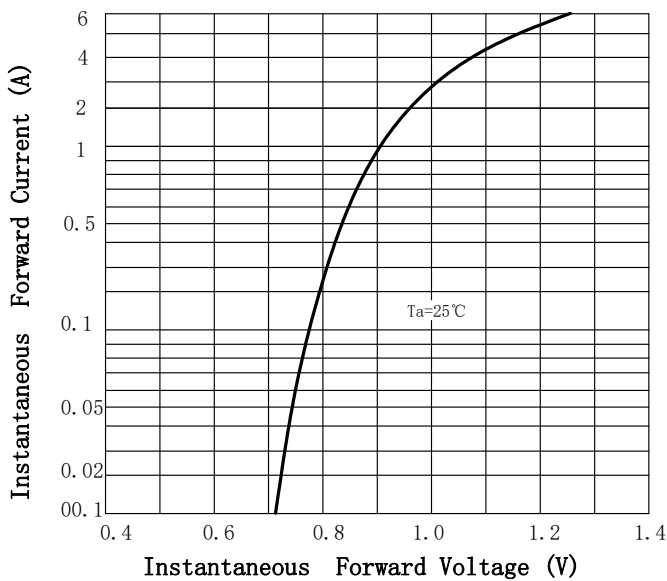
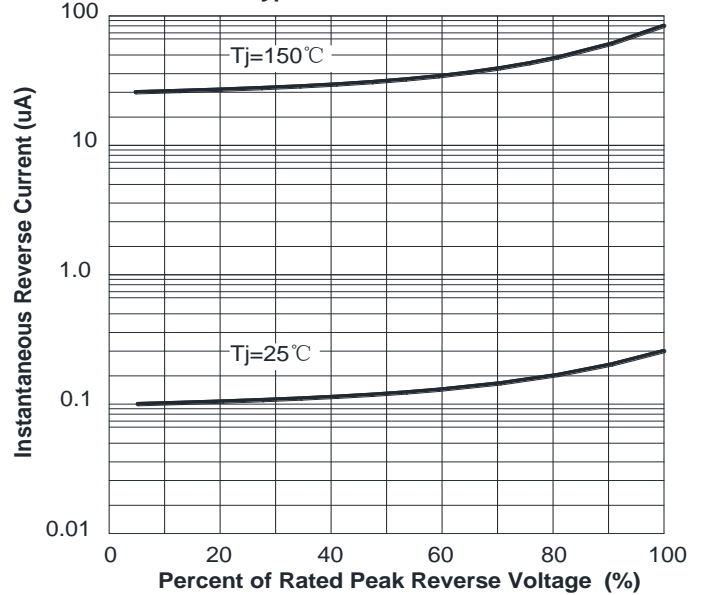
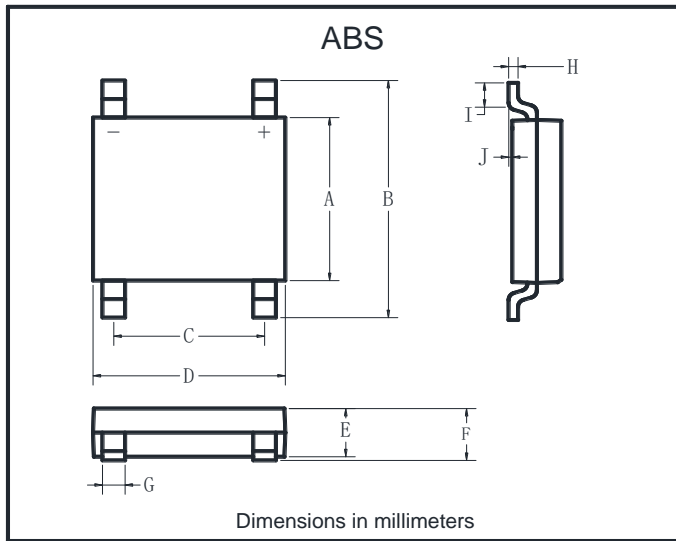


FIG4: Typical Reverse Characteristics

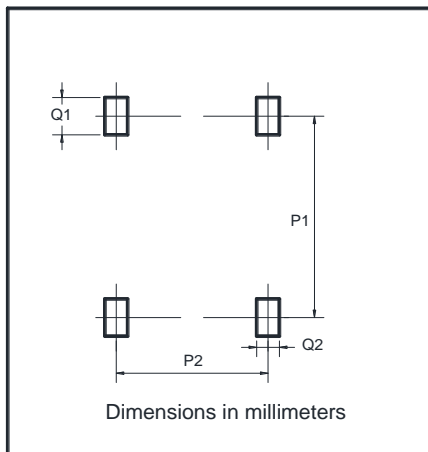


■ Outline Dimensions



ABS		
Dim	Min	Max
A	4.30	4.50
B	6.00	6.40
C	3.90	4.10
D	4.90	5.10
E	1.25	1.45
F	1.60 Max	
G	0.60	0.70
H	0.15	0.25
I	0.30	0.80
J	0.02	0.15

■ Suggested pad layout



Dim	Min
P1	5.72
P2	4.00
Q1	1.00
Q2	0.90

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