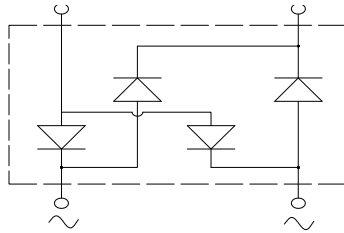
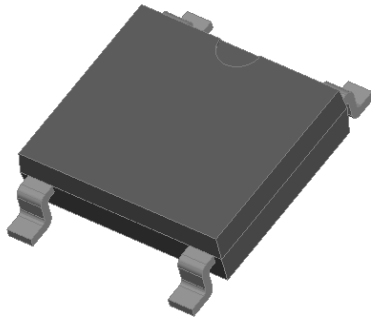


Bridge Rectifiers



Features

- UL recognition, file #E313149
- Ideal for automated placement
- High surge current capability
- Meets MSL level 1, per J-STD-020, LF maximum peak of 260 °C

Typical Applications

General purpose use in high frequency 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 (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	HABS1502	HABS1504	HABS1506	HABS1508	HABS1510
Device marking code			HABS1502	HABS1504	HABS1506	HABS1508	HABS1510
Repetitive peak reverse voltage	VRRM	V	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load, on Alumina Substrate	IO	A	1.5				
			1.2				
Surge(non-repetitive)forward current @60 Hz half sine wave, 1 cycle, Tj=25°C	IFSM	A	40				
Current squared time @1ms≤t<8.3ms Tj=25°C, Rating of per diode	I ² t	A ² s	6.6				
Storage temperature	Tstg	°C	-55 ~+150				
Junction temperature	Tj	°C	-55 ~+150				

■Electrical Characteristics (Ta=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	HABS1502	HABS1504	HABS1506	HABS1508	HABS1510
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=0.7A	1.00		1.30	1.70	
Maximum Reverse Recovery Time	Trr	ns	IF=0.5A,IR=1.0A, Irr=0.25A	50			75	
Maximum DC reverse current at rated DC blocking voltage per diode	I _{RRM}	μA	V _{RM} =V _{VRRM}	5				



HABS1502 THRU HABS1510

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

PARAMETER		SYMBOL	UNIT	HABS1502	HABS1504	HABS1506	HABS1508	HABS1510
Thermal Resistance	Between junction and ambient, On alumina substrate	R θ J-A	$^{\circ}\text{C/W}$	62.5				
	Between junction and ambient, On glass-epoxy substrate			123.0				
	Between junction and lead	R θ J-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
HABS1502-HABS1510	F1	Approximate 0.095	4000	8000	64000	13" reel
HABS1502-HABS1510	F5	Approximate 0.095	5000	10000	80000	13" reel

■ Characteristics (Typical)

FIG1: I_o - T_a Curve

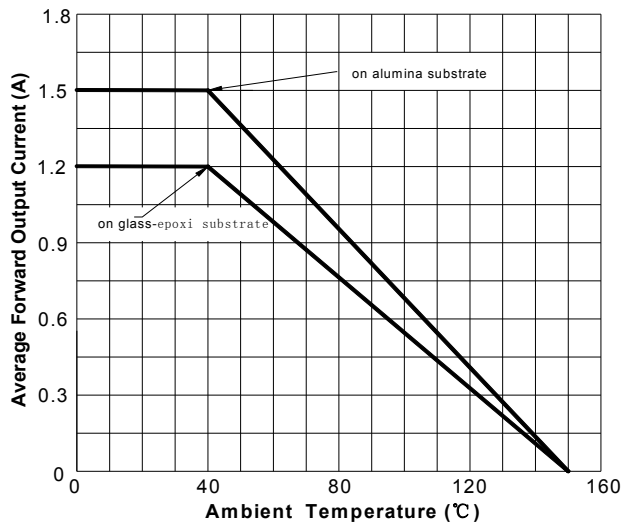


FIG2: Surge Forward Current Capability

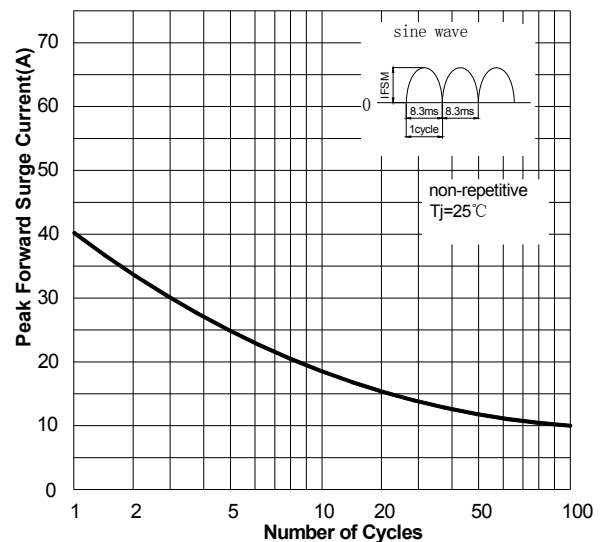


FIG3: Forward Voltage

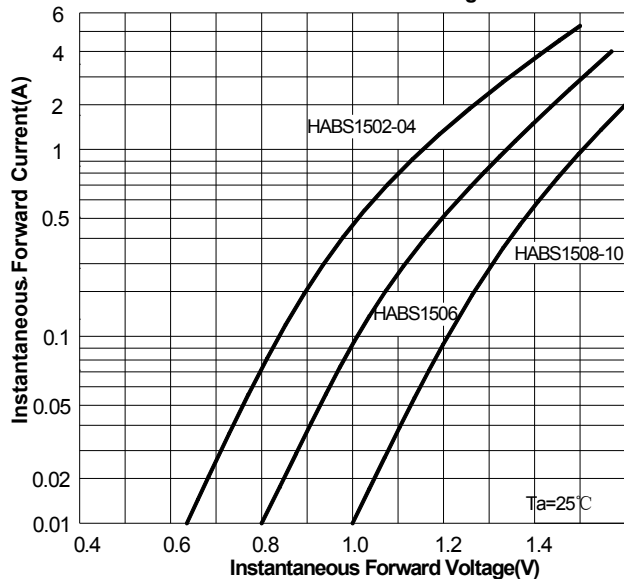
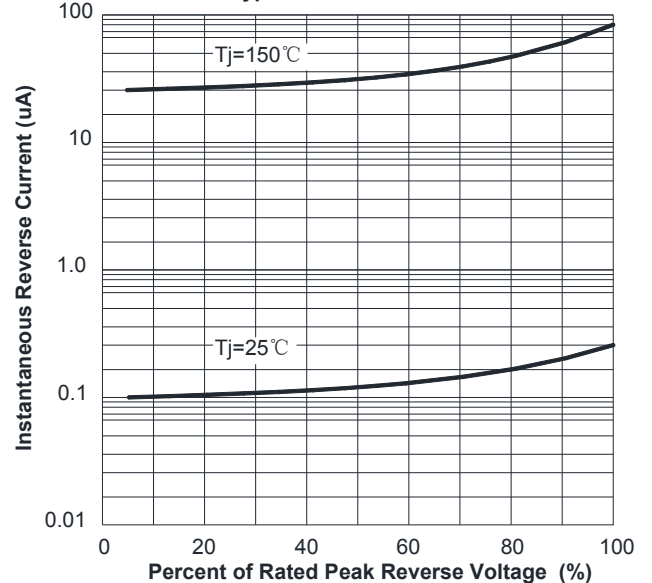


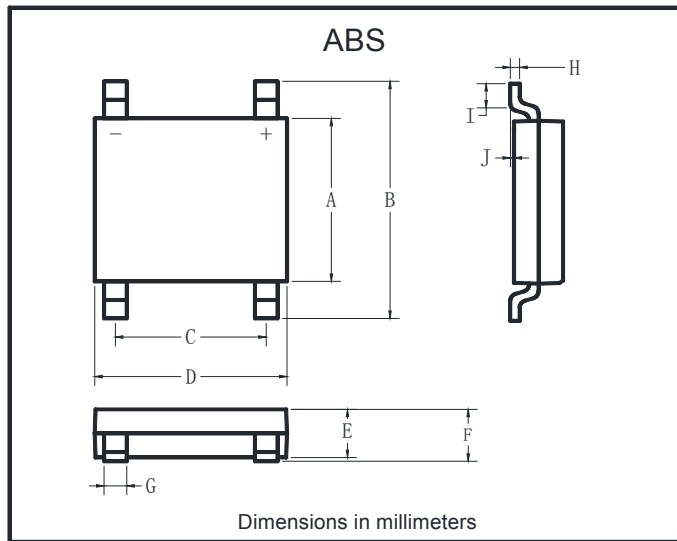
FIG4: Typical Reverse Characteristics





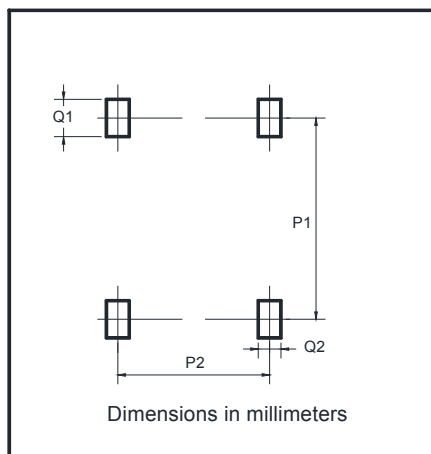
HABS1502 THRU HABS1510

■ 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



HABS1502 THRU HABS1510

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