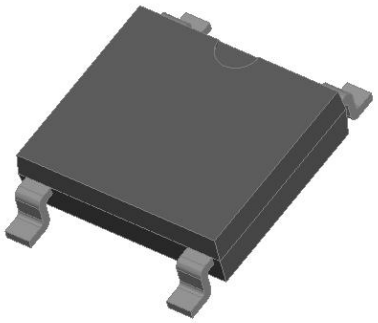
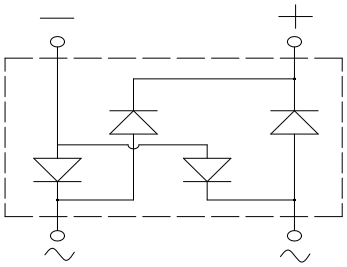
Bridge Rectifiers





Features

- Ideal for automated placement
- Glass passivated chip junction
- High surge current capability
- Meets MSL level 1, per J-STD-020, LF maximum 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 (Ta=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	ABS2	ABS4	ABS6	ABS8	ABS10
Device marking code			ABS2	ABS4	ABS6	ABS8	ABS10
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	V	200	400	600	800	1000
Maximum RMS Voltage	V_{RMS}	V	140	280	420	560	700
Maximum DC blocking Voltage	V_{DC}	V	200	400	600	800	1000
Average rectified output current @60Hz sine wave, R-load, Tc=135℃	I_O	A	1.0				
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25℃	I_{FSM}	A	35				
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25℃			70				
Current squared time @1ms≤t<8.3ms Tj=25℃, Rating of per diode	I^2t	A^2s	5.1				
Storage temperature	T_{stg}	℃	-55 ~ +150				
Junction temperature	T_j	℃	-55 ~ +150				

■Electrical Characteristics (Ta=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	ABS2	ABS4	ABS6	ABS8	ABS10
Maximum instantaneous forward voltage drop per diode	V_F	V	I_{FM}=0.5A	0.95				
Maximum DC reverse current at rated DC blocking voltage per diode	I_R	μA	T_j=25℃	5				
			T_j=125℃	100				
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	12				

■Thermal Characteristics （Ta=25℃ Unless otherwise specified）

PARAMETER		SYMBOL	UNIT	ABS2	ABS4	ABS6	ABS8	ABS10
Thermal Resistance	Between junction and ambient	RθJ-A	℃/W	62.5				
	Between junction and lead	RθJ-L		25.0				
	Between junction and case	RθJ-C		8.0				

Note: Device mounted on P.C.B with 35mm*25mm*1.7mm

■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
ABS2 - ABS10	F1	Approximate 0.095	4000	/	64000	13” reel
ABS2 - ABS10	F5	Approximate 0.095	5000	/	80000	13” reel

■ Characteristics (Typical)

FIG1:Io-Tc Curve

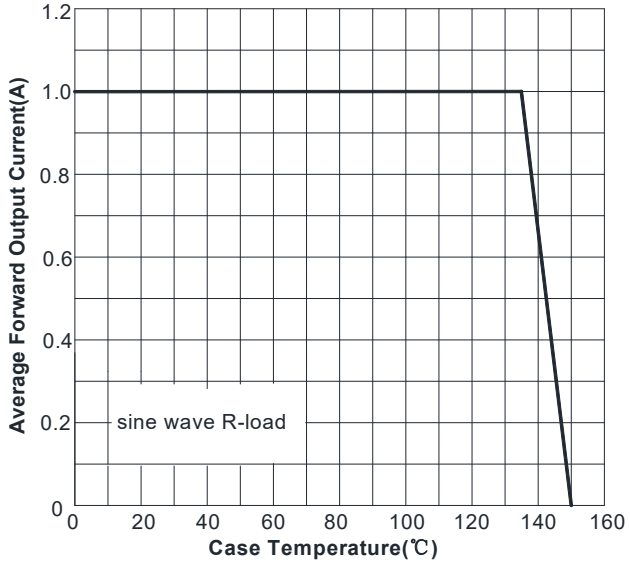


FIG2:Surge Forward Current Ca pability

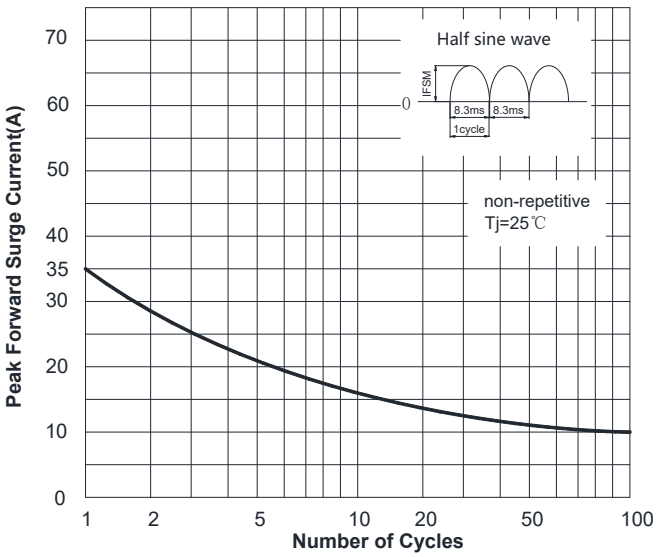


FIG3: Typical Forward Voltage

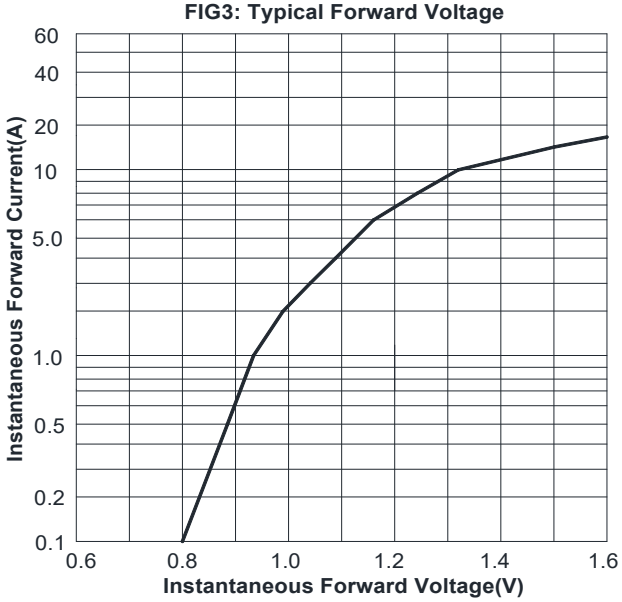
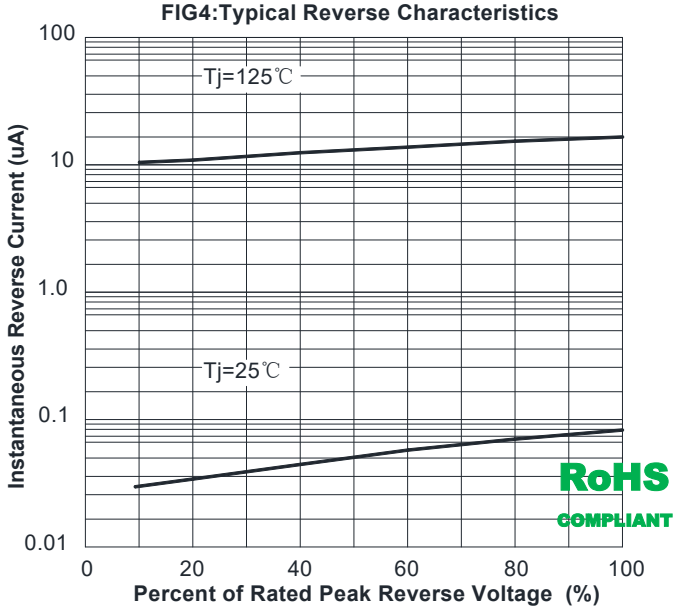
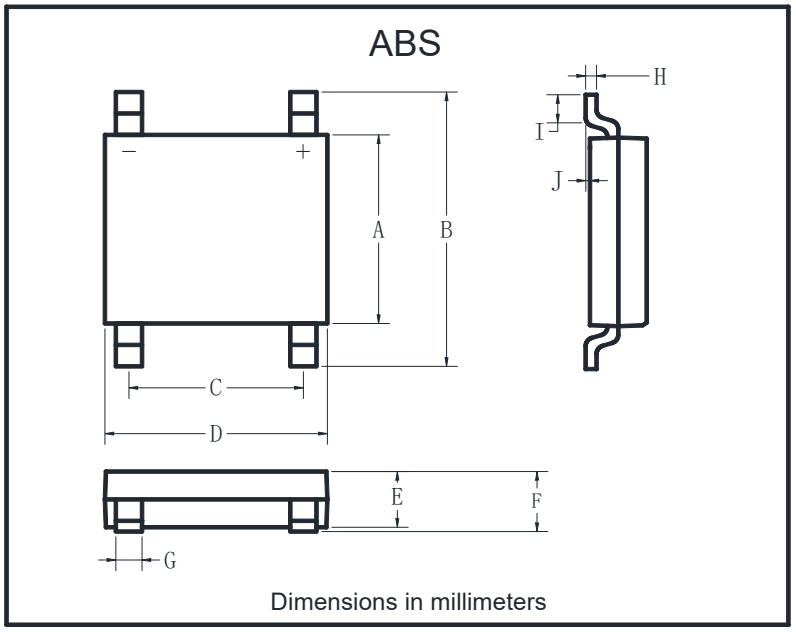


FIG4:Typical Reverse Characteristics



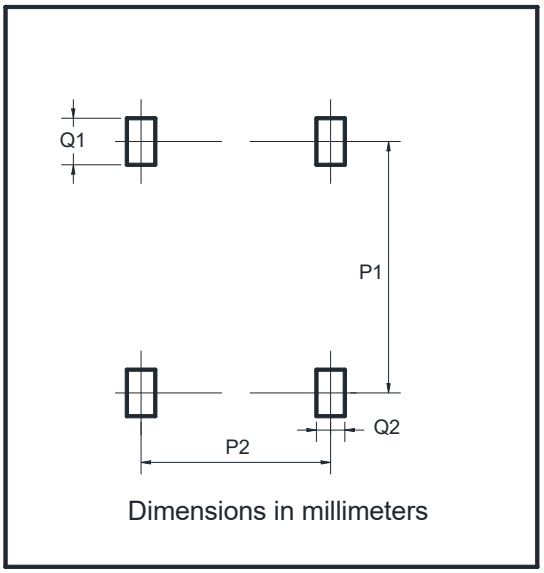
RoHS COMPLIANT

■ 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

Notice

All products, product specifications and data are subject to change without notice to improve reliability, function or design or otherwise.Information contained herein is intended to provide a product description only. No license, express or implied, to any intellectual property rights is granted by this document. Except as provided in STARSEA's terms and conditions of sale for such products, STARSEA assumes no liability whatsoever, and disclaims any express or implied warranty, relating to sale and/or use of STARSEA products including liability or warranties relating to fitness for a particular purpose, merchantability, or infringement of any patent, copyright, or other intellectual property right.