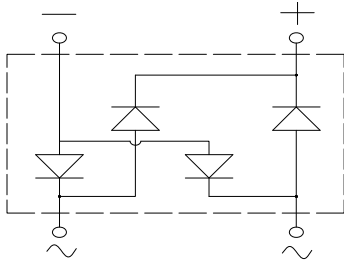


## Bridge Rectifiers



### 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
- Schottky chip

### Typical Applications

General purpose use in high frequency 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, -compliant, Halogen free
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** As marked on body

### ■ Maximum Ratings (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	ABSK12S	ABSK14S	ABSK16S	ABSK18S	ABSK110S
Device marking code			ABSK12S	ABSK14S	ABSK16S	ABSK18S	ABSK110S
Repetitive peak reverse voltage	VRRM	V	20	40	60	80	100
Average rectified output current @60Hz sine wave, R-load, T <sub>A</sub> (FIG.1)	I <sub>O</sub>	A	1.0				
Surge(non-repetitive)forward current @60Hz half sine wave, 1 cycle, T <sub>J</sub> =25°C	I <sub>FSM</sub>	A	30				
Current squared time @1ms≤t≤8.3ms T <sub>J</sub> =25°C, Rating of per diode	I <sup>2</sup> t	A <sup>2</sup> s	3.7				
Storage temperature	T <sub>stg</sub>	°C	-55 ~+150				
Junction temperature	T <sub>j</sub>	°C	-55 ~+125		-55 ~+150		

### ■ Electrical Characteristics (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	ABSK12S	ABSK14S	ABSK16S	ABSK18S	ABSK110S
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	I <sub>FM</sub> =0.5A	0.50		0.70	0.85	
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>RRM</sub>	μA	T <sub>a</sub> =25°C	500			100	
			T <sub>a</sub> =100°C	10000			5000	

■ **Thermal Characteristics** (T<sub>a</sub>=25°C Unless otherwise specified)

PARAMETER		SYMBOL	UNIT	ABSK12S	ABSK14S	ABSK16S	ABSK18S	ABSK110S
Thermal Resistance	Between junction and ambient, On alumina substrate	R <sub>θJ-A</sub>	°C/W	62.5				
	Between junction and lead	R <sub>θJ-L</sub>		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
ABSK12S-ABSK110S	F1	Approximate 0.095	4000	8000	64000	13" reel
ABSK12S-ABSK110S	F5	Approximate 0.095	5000	10000	80000	13" reel

■ **Characteristics (Typical)**

FIG1: I<sub>o</sub>-T<sub>a</sub> Curve

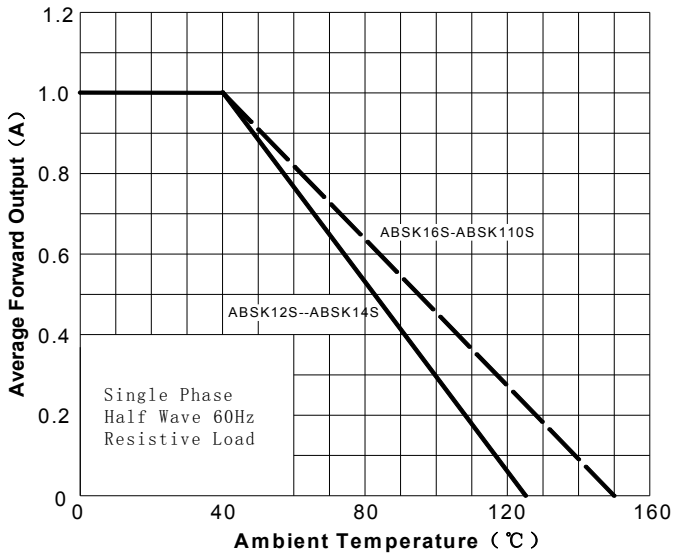


FIG2: Surge Forward Current Capability

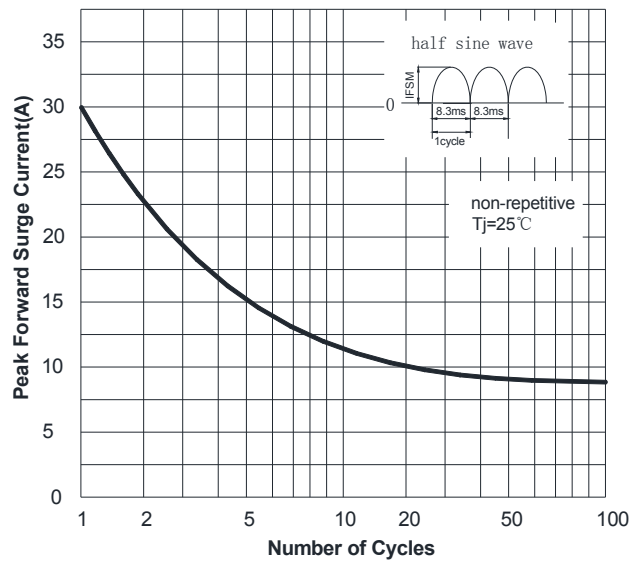


FIG3: Forward Voltage

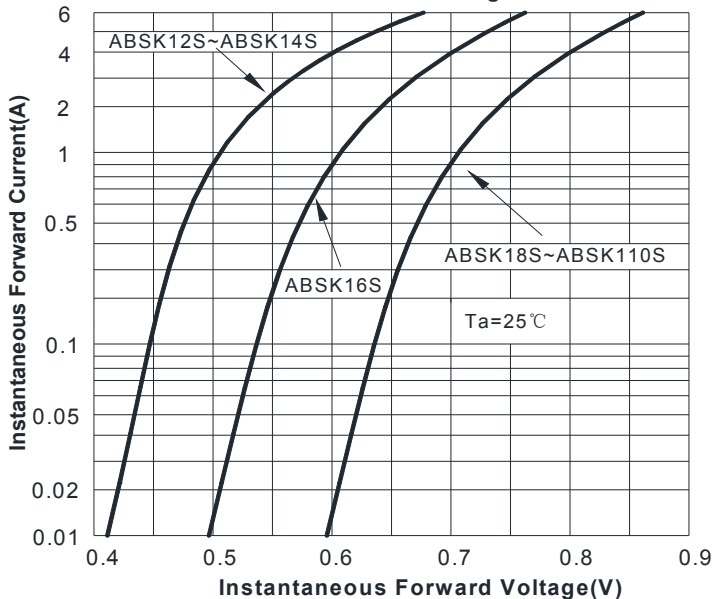
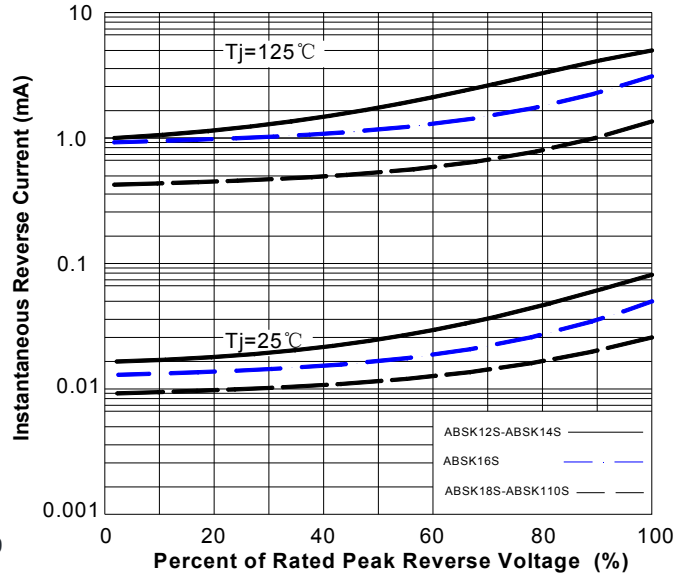
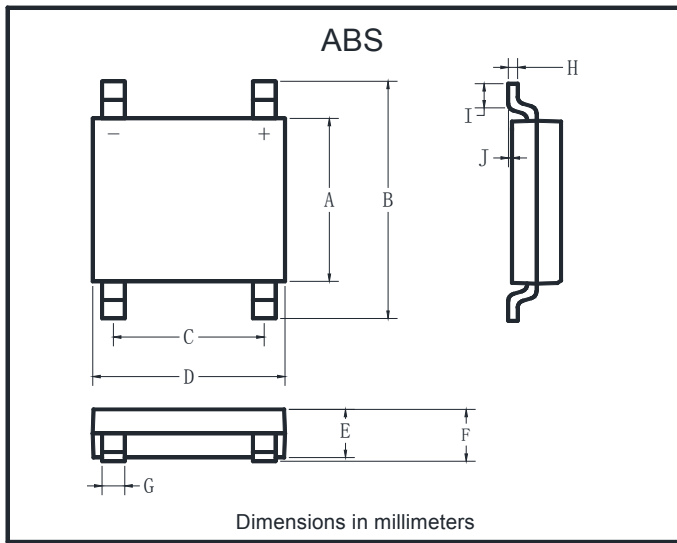


FIG4: Typical Reverse Characteristics

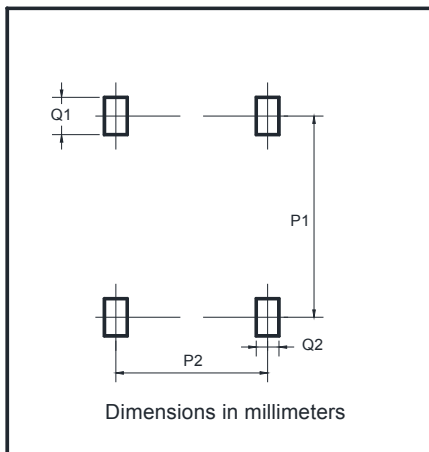


■ Outline Dimensions



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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