

## Bridge Rectifiers

### Features

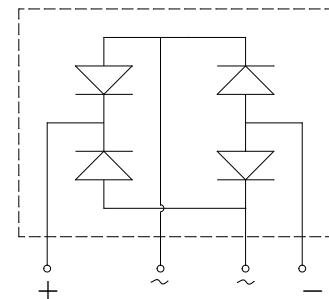
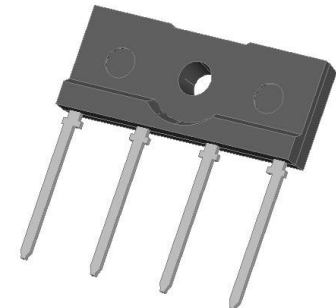
- UL recognition, file #E230084
- Thin single in-line package
- High surge current capability
- Solder dip 275 °C max. 7 s, per JESD 22-B106

### Typical Applications

General purpose use in AC/DC bridge full wave rectification for switching power supply, home appliances, office equipment, industrial automation applications.

### Mechanical Data

- **Package:** JB  
Molding compound meets UL 94 V-0 flammability rating, RoHS-compliant
- **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	D8JB05	D8JB10	D8JB20	D8JB40	D8JB60	D8JB80	D8JB100
Device marking code			D8JB05	D8JB10	D8JB20	D8JB40	D8JB60	D8JB80	D8JB100
Repetitive Peak Reverse Voltage	VRRM	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, R-load,	With heatsink T <sub>c</sub> =95°C	IO	A	8.0					
	Without heatsink T <sub>a</sub> =25°C			3.2					
Surge(non-repetitive)forward current @60Hz half-sine wave, 1 cycle, T <sub>j</sub> =25°C	IFSM	A	175						
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	127						
Storage Temperature	T <sub>stg</sub>	°C	-55 ~+150						
Junction Temperature	T <sub>j</sub>	°C	-55 ~+150						
Dielectric strength @ terminals to case, AC 1 minute	V <sub>dis</sub>	KV	2						
Mounting torque @recommend torque: 5kg · cm	Tor	kg · cm	8						

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	D8JB05	D8JB10	D8JB20	D8JB40	D8JB60	D8JB80	D8JB100
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	IFM=4.0A	1.00						
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>RRM</sub>	μA	V <sub>RM</sub> =V <sub>RRM</sub>	5						

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

PARAMETER		SYMBOL	UNIT	D8JB05	D8JB10	D8JB20	D8JB40	D8JB60	D8JB80	D8JB100
Thermal Resistance	Between junction and ambient, Without heatsink	$R_{\theta J-A}$	$^\circ\text{C/W}$	28.0						
	Between junction and case, With heatsink	$R_{\theta J-C}$		2.8						

■ **Ordering Information (Example)**

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
D8JB05-D8JB100	B1	Approximate 2.4	20	900	1800	Tube

■ **Characteristics(Typical)**

FIG1:  $I_o$ - $T_c$  Curve

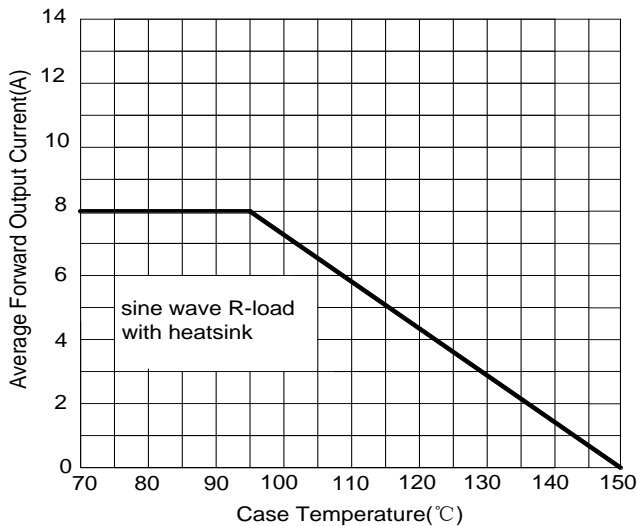


FIG2: Surge Forward Current Capability

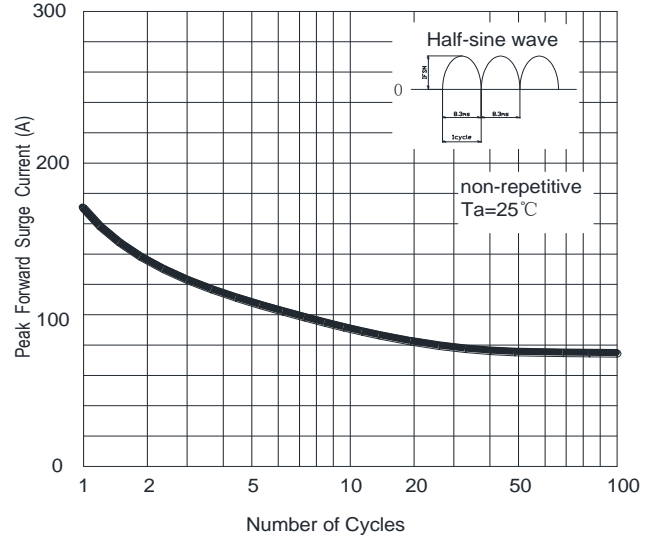


FIG3: Instantaneous Forward Voltage

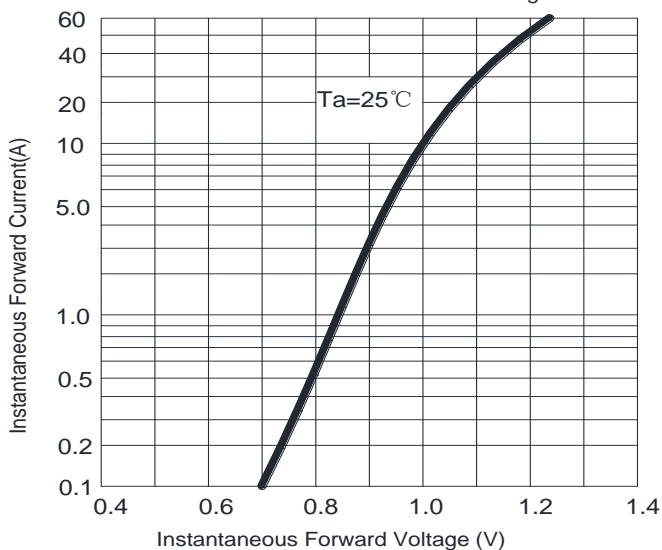
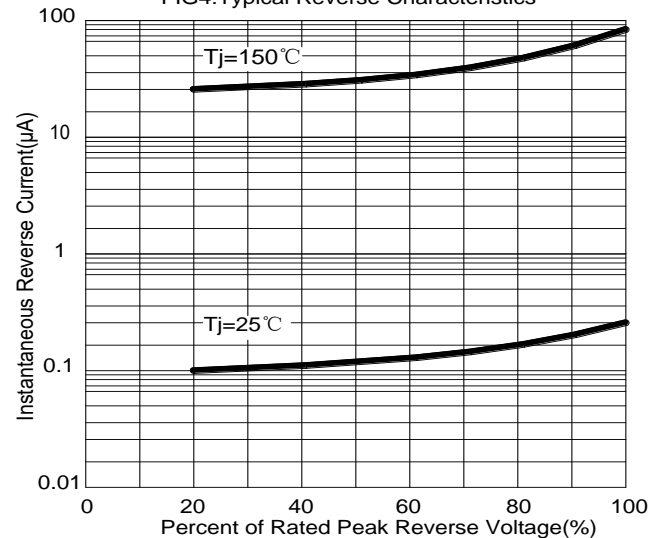
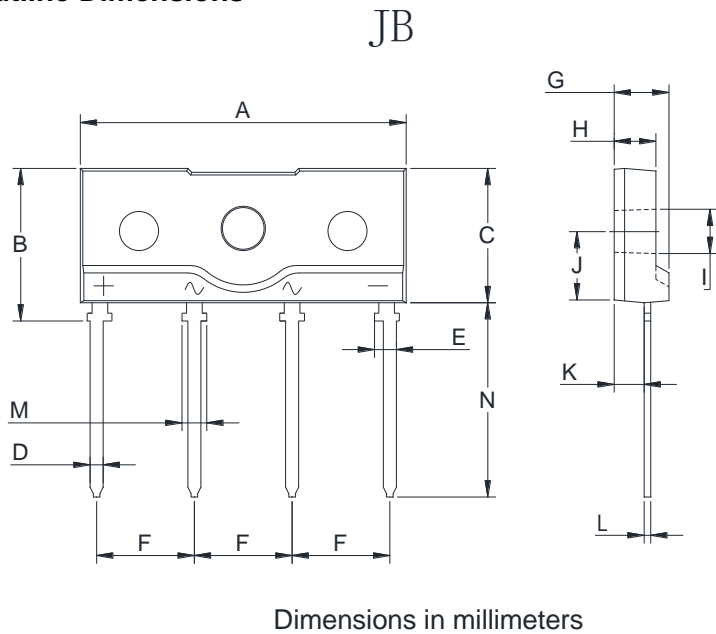


FIG4: Typical Reverse Characteristics



■ **Outline Dimensions**



JB		
Dim	Min	Max
A	24.7	25.3
B	11.4	12.0
C	10.0	10.6
D	0.9	1.1
E	1.75(MAX)	
F	7.3	7.7
G	3.9	4.5
H	2.9	3.9
I	3.1	3.4
J	5.4	6.0
K	2.0	2.6
L	0.4	0.6
M	2.1	2.3
N	14.6	15.2

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