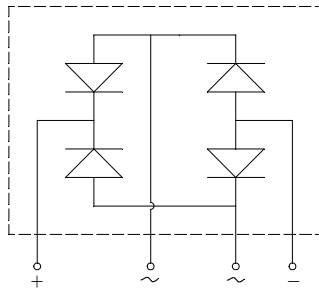


Bridge Rectifiers



Features

- UL recognition, file #E230084
- Glass passivated chip junction
- 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, 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	D10JB05A	D10JB10A	D10JB20A	D10JB40A	D10JB60A	D10JB80A	D10JB100A
Device marking code			D10JB05A	D10JB10A	D10JB20A	D10JB40A	D10JB60A	D10JB80A	D10JB100A
Maximum Repetitive Peak Reverse Voltage	VRRM	V	50	100	200	400	600	800	1000
Maximum RMS Voltage	VRMS	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	VDC	V	50	100	200	400	600	800	1000
Average Rectified Output Current @60Hz sine wave, R-load	With heatsink $T_c = 110^\circ\text{C}$	IO	A	10.0					
	Without heatsink $T_a = 25^\circ\text{C}$			3.2					
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, $T_j = 25^\circ\text{C}$	IFSM	A	220						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, $T_j = 25^\circ\text{C}$			440						
Current squared time @1ms ≤ t ≤ 8.3ms $T_j = 25^\circ\text{C}$, rating of per diode	I ² t	A ² S	200.9						
Storage temperature	Tstg	°C	-55 ~ +150						
Junction temperature	Tj	°C	-55 ~ +150						
Dielectric strength @ Terminals to case, AC 1 minute	Vdis	KV	2						
Mounting torque @Recommend torque: 5kg·cm	Tor	kg·cm	8						



D10JB05A THRU D10JB100A

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	D10JB05	D10JB10A	D10JB20A	D10JB40A	D10JB60A	D10JB80A	D10JB100A
Maximum instantaneous forward voltage drop per diode	V _F	V	I _{FM} =5.0A				1.0			
Maximum DC reverse current at rated DC blocking voltage per diode	I _R	μA	T _j =25°C				5			
			T _j =125°C				100			
Typical junction capacitance	C _j	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C				70			

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

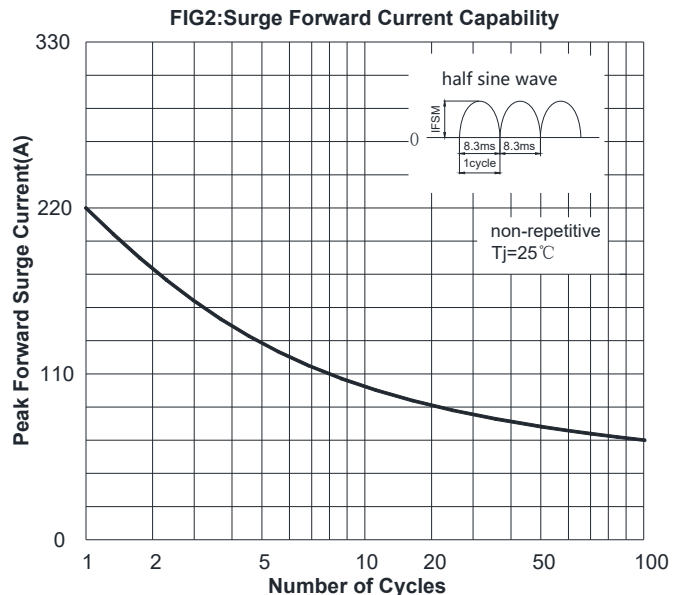
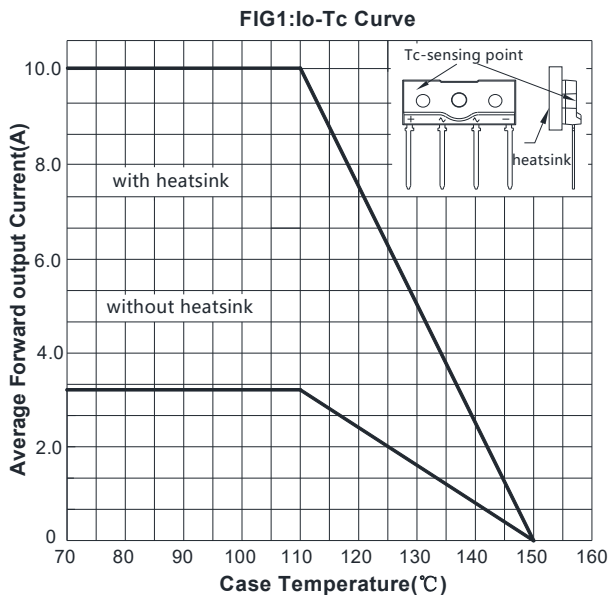
PARAMETER		SYMBOL	UNIT	D10JB05A	D10JB10A	D10JB20A	D10JB40A	D10JB60A	D10JB80A	D10JB100A
Thermal Resistance	Between junction and ambient, Without heatsink	R _{θJ-A}	°C/W				28.0			
	Between junction and case, With heatsink	R _{θJ-C}					2.0			

Note: Device mounted on 75mm x 45mm x 5.5mm Aluminum Plate Heatsink.

■ Ordering Information (Example)

PREFERED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
D10JB05A ~ D10JB100A	B1	Approximate 2.4	20	900	1800	Tube

■ Characteristics(Typical)





D10JB05A THRU D10JB100A

FIG3: Typical Forward Voltage

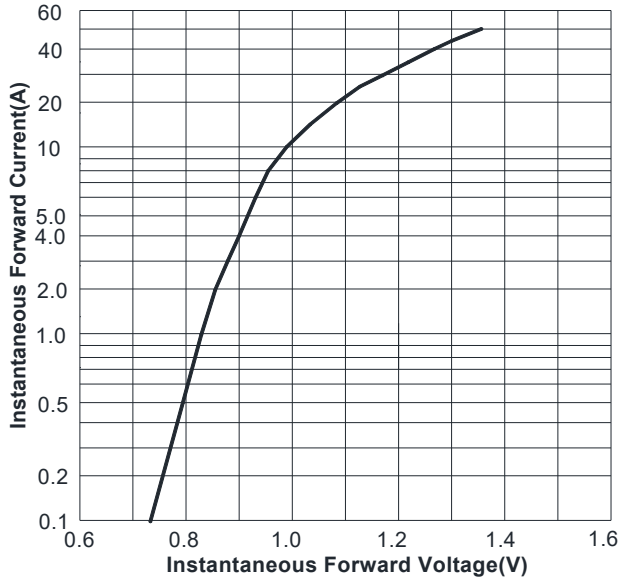
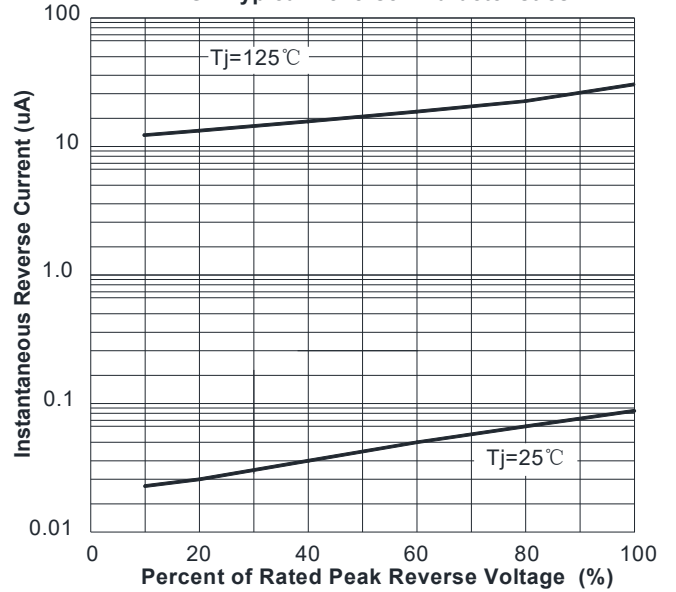
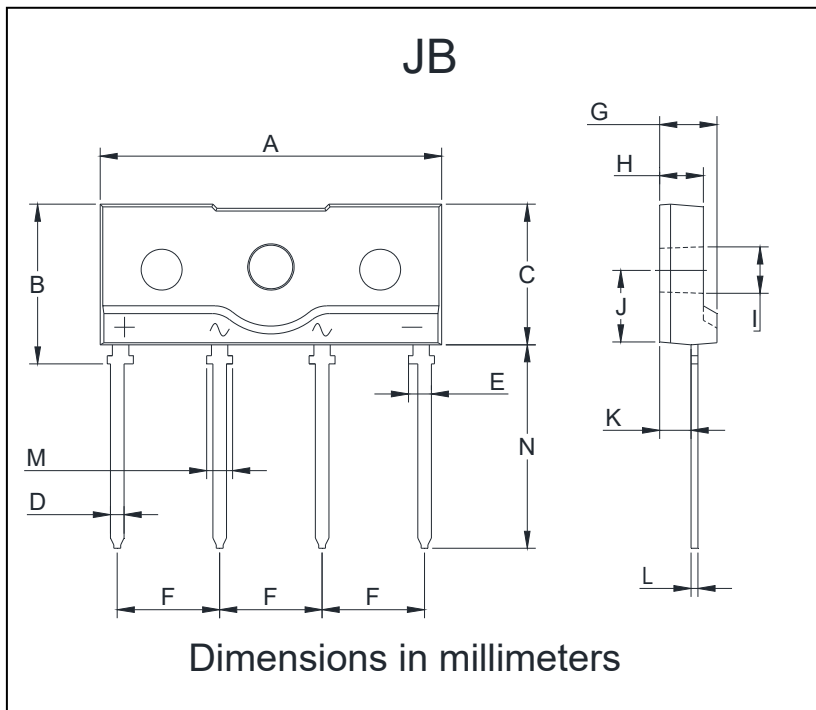


FIG4: Typical Reverse Characteristics



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



D10JB05A THRU D10JB100A

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