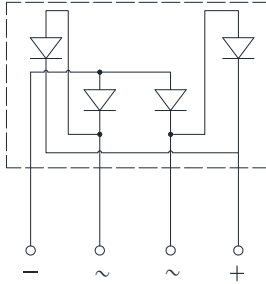
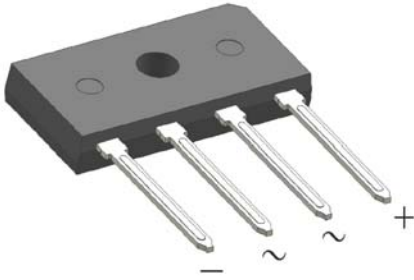


## Bridge Rectifiers



### 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 monitor, TV, printer, power supply, switching mode power supply, adapter, audio equipment, and home appliances applications.

### Mechanical Data

- **Package:** JC  
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	D10JC05	D10JC10	D10JC20	D10JC40	D10JC60	D10JC80	D10JC100
Device marking code			D10JC05	D10JC10	D10JC20	D10JC40	D10JC60	D10JC80	D10JC100
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 $T_c=105^{\circ}\text{C}$	IO	A	10.0					
	Without heatsink $T_a=25^{\circ}\text{C}$			2.5					
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, $T_j=25^{\circ}\text{C}$	IFSM	A	175						
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, $T_j=25^{\circ}\text{C}$			350						
Current squared time @1ms≤t≤8.3ms $T_j=25^{\circ}\text{C}$ , 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						



# D10JC05 THRU D10JC100

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	D10JC05	D10JC10	D10JC20	D10JC40	D10JC60	D10JC80	D10JC100	
Maximum instantaneous forward voltage drop per diode	V <sub>F</sub>	V	IFM=5.0A							1.0	
Maximum DC reverse current at rated DC blocking voltage per diode	I <sub>R</sub>	μA	T <sub>j</sub> =25°C							5	
			T <sub>j</sub> =125°C							100	
Typical junction capacitance	C <sub>j</sub>	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C							50	

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

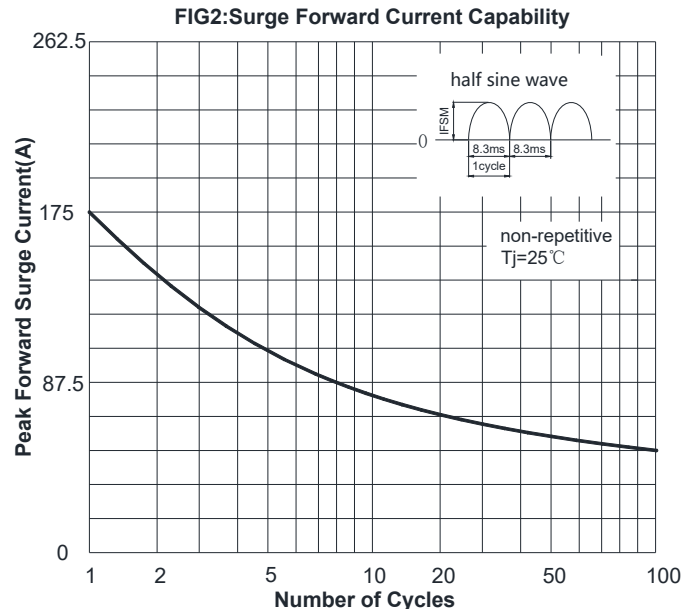
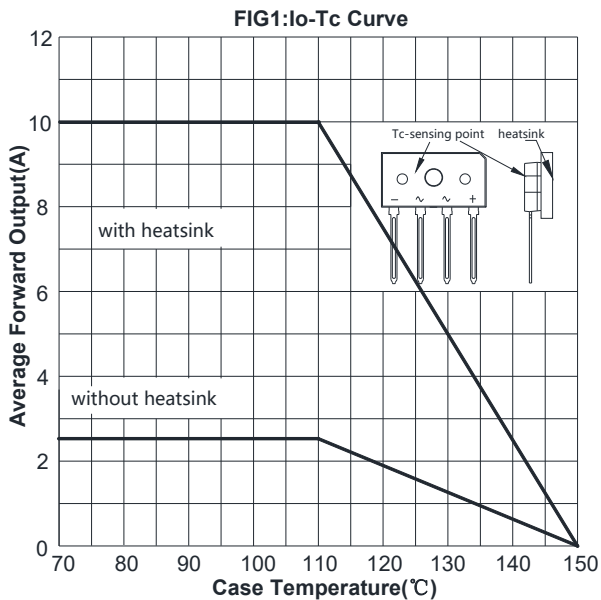
PARAMETER		SYMBOL	UNIT	D10JC05	D10JC10	D10JC20	D10JC40	D10JC60	D10JC80	D10JC100	
Thermal Resistance	Between junction and ambient, Without heatsink	R <sub>θJ-A</sub>	°C/W							30.0	
	Between junction and case, With heatsink	R <sub>θJ-C</sub>								2.2	

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

## ■Ordering Information (Example)

PREFERRED P/N	PACKAGE CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
D10JC05 ~ D10JC100	B1	Approximate 2	25	625	5000	Tube
D10JC05 ~ D10JC100	A1	Approximate 2	500	500	5000	Box

## ■ Characteristics (Typical)





# D10JC05 THRU D10JC100

FIG3: Typical Forward Voltage

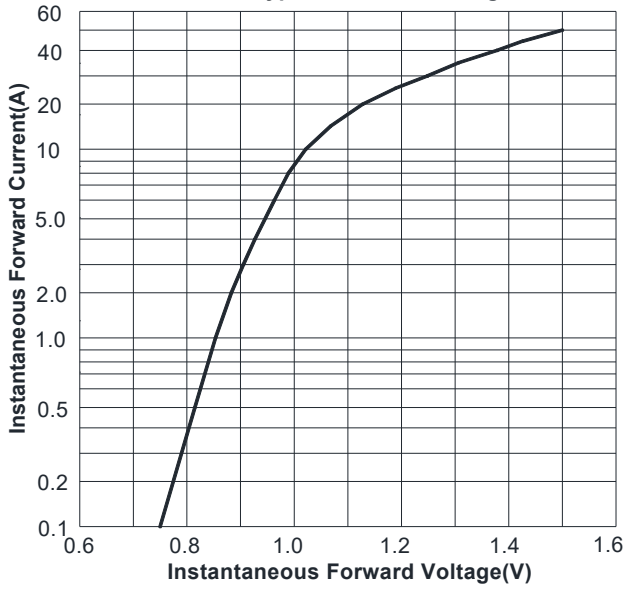
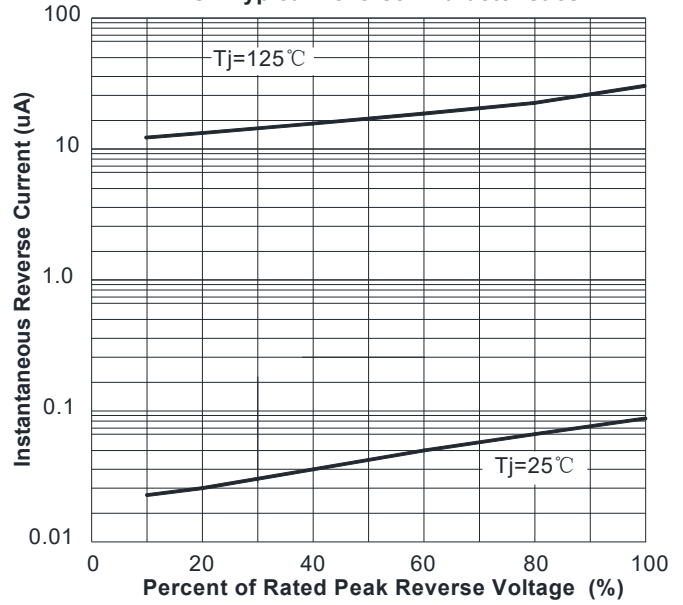
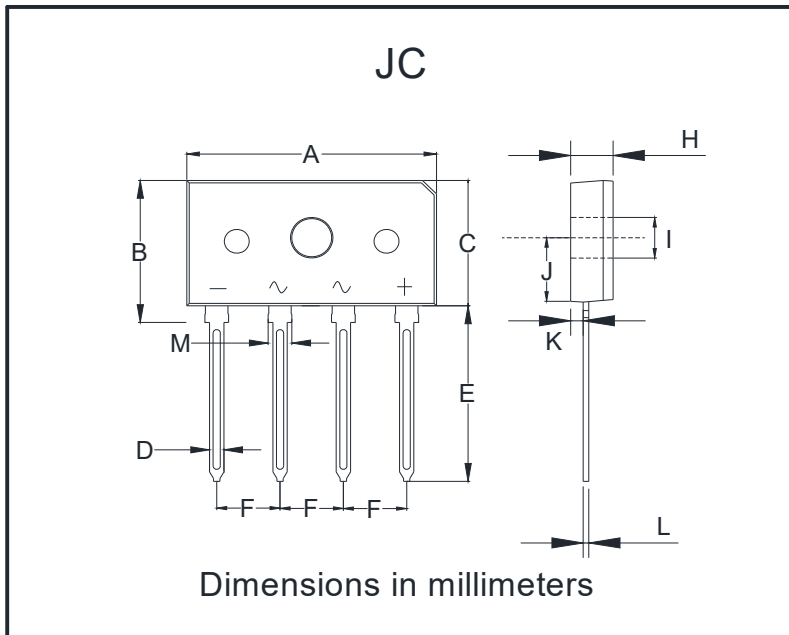


FIG4: Typical Reverse Characteristics



## ■ Outline Dimensions



JC		
Dim	Min	Max
A	19.60	20.40
B	11.50	12.30
C	10.10	10.90
D	1.00	1.30
E	14.20	15.00
F	4.88	5.28
H	3.10	3.70
I	2.95	3.35
J	5.30	5.90
K	0.70	1.30
L	0.30	0.60
M	1.70	2.10



## D10JC05 THRU D10JC100

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□

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