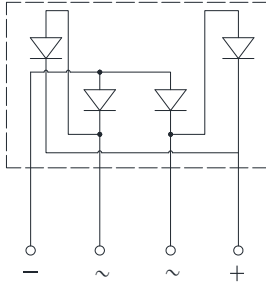
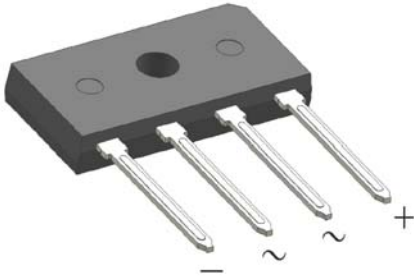


Fast Recovery Bridge Rectifiers



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	RD8JC80	RD8JC100
Device marking code				RD8JC80	RD8JC100
Maximum Repetitive Peak Reverse Voltage		VRRM	V	800	1000
Maximum RMS Voltage		VRMS	V	560	700
Maximum DC blocking Voltage		VDC	V	800	1000
Average rectified output current @60Hz sine wave, R-load	With heatsink $T_c = 120^\circ\text{C}$	IO	A	8.0	
	Without heatsink $T_a = 25^\circ\text{C}$			2.0	
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave, 1 cycle, $T_j = 25^\circ\text{C}$		IFSM	A	160	
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, $T_j = 25^\circ\text{C}$				320	
Current squared time @1ms ≤ t ≤ 8.3ms $T_j = 25^\circ\text{C}$, Rating of per diode		I ² t	A ² s	106.2	
Storage temperature		T _{stg}	°C	-55 ~ +150	
Junction temperature		T _j	°C	-55 ~ +150	
Dielectric strength @ Terminals to case, AC 1 minute		V _{dis}	KV	2	
Mounting torque @Recommend torque: 5kg·cm		Tor	kg·cm	8	



RD8JC80 THRU RD8JC100

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

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	RD8JC80	RD8JC100
Maximum reverse recovery time	t _r	ns	I _F =0.5A, I _R =1.0A, I _{rr} =0.25A	500	
Maximum instantaneous forward voltage drop per diode	V _F	V	IFM=4.0A	1.3	
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	47	

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

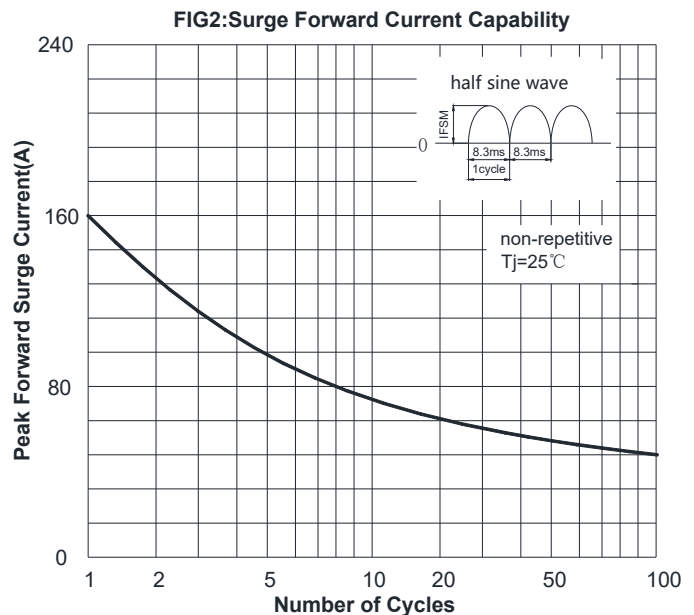
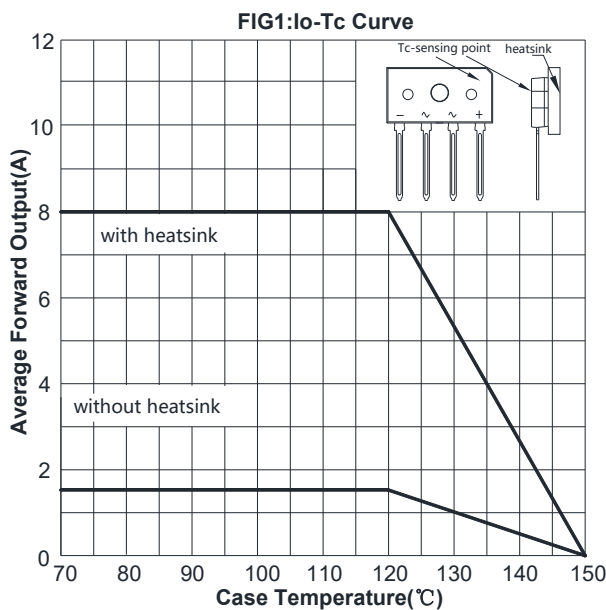
PARAMETER		SYMBOL	UNIT	RD8JC80	RD8JC100
Thermal resistance	Between junction and ambient, Without heatsink	R _{θJ-A}	°C/W	35.0	
	Between junction and case, With heatsink	R _{θJ-C}		1.5	

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
RD8JC80 ~ RD8JC100	B1	Approximate 2	25	625	5000	Tube
RD8JC80 ~ RD8JC100	A1	Approximate 2	500	500	5000	Box

■ Characteristics (Typical)





RD8JC80 THRU RD8JC100

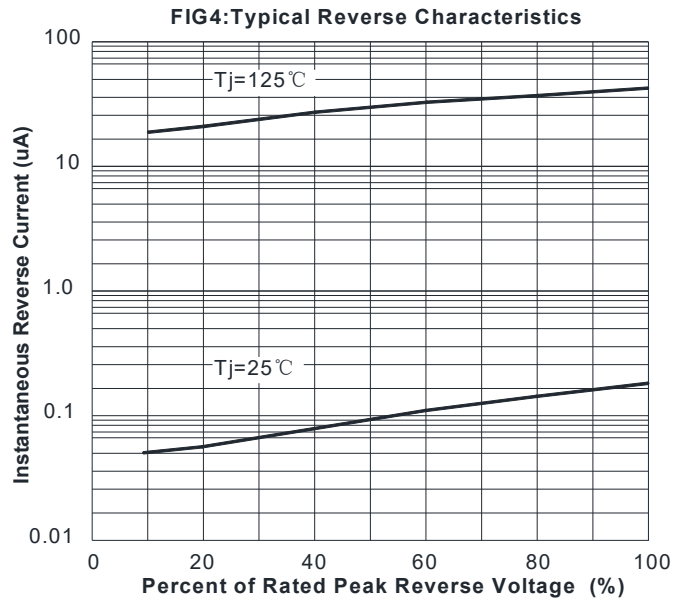
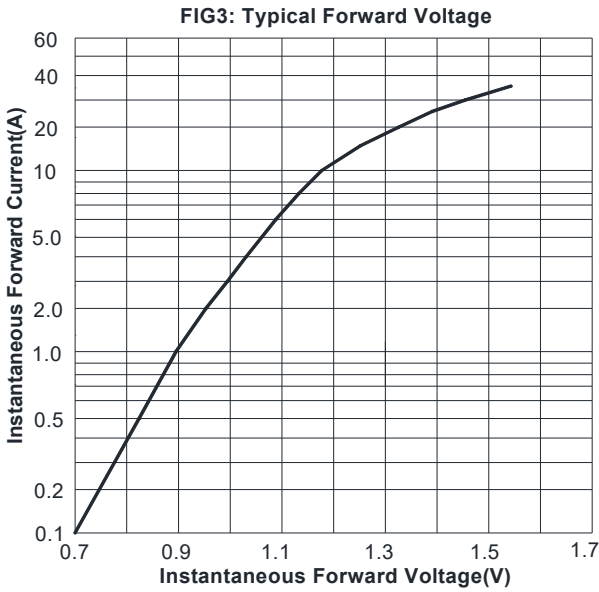
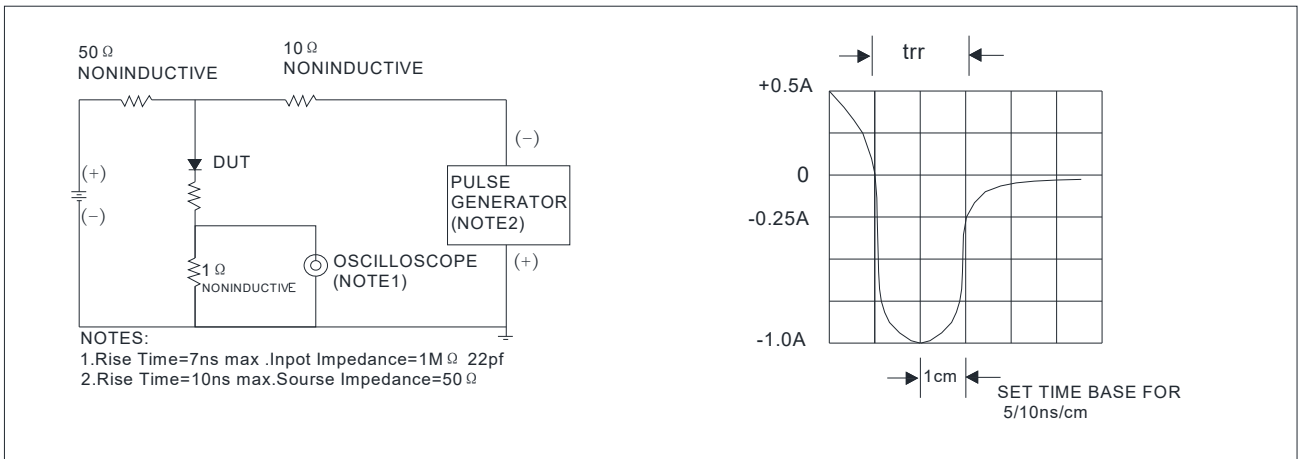
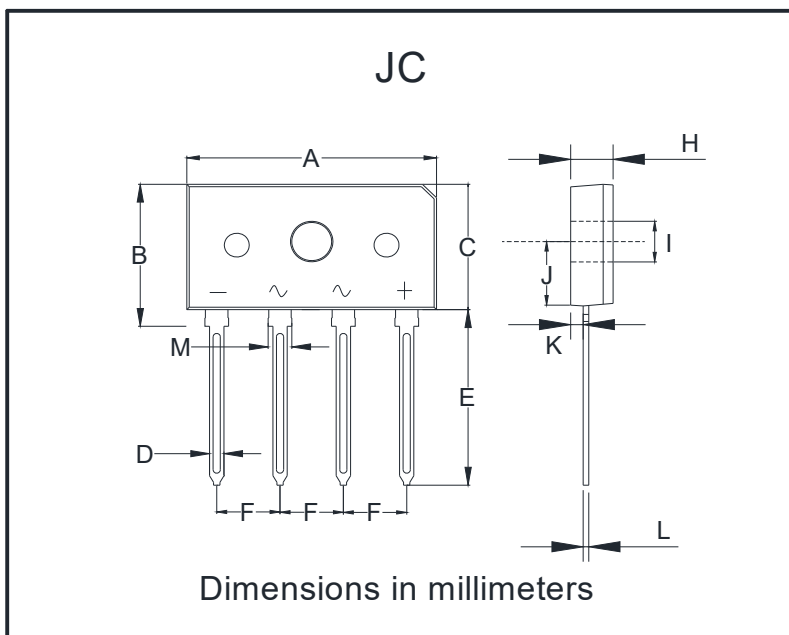


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



■ 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



RD8JC80 THRU RD8JC100

Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website [http:// www.21yangjie.com](http://www.21yangjie.com) , or consult your nearest Yangjie's sales office for further assistance.