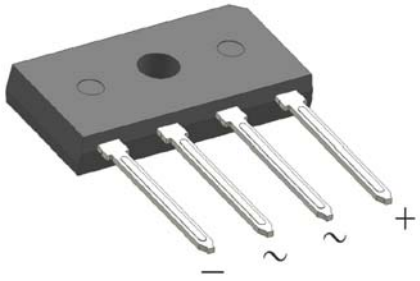
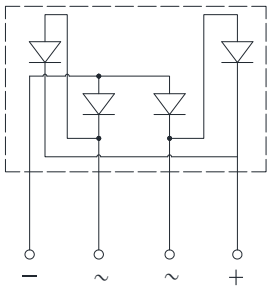
Fast Recovery Bridge Rectifiers





Features

- 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℃ Unless otherwise specified）

PARAMETER		SYMBOL	UNIT	RD8JC80	RD8JC100
Device marking code				RD8JC80	RD8JC100
Maximum Repetitive Peak Reverse Voltage		V_{RRM}	V	800	1000
Maximum RMS Voltage		V_{RMS}	V	560	700
Maximum DC blocking Voltage		V_{DC}	V	800	1000
Average rectified output current @60Hz sine wave, R-load	With heatsink T_C =120℃	I_O	A	8.0	
	Without heatsink T_a =25℃			2.0	
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25℃		I_{FSM}	A	160	
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25℃				320	
Current squared time @1ms≤t≤8.3ms Tj=25℃, Rating of per diode		I^2t	A^2s	106.2	
Storage temperature		T_{stg}	℃	-55 ~ +150	
Junction temperature		T_j	℃	-55 ~ +150	
Dielectric strength @ Terminals to case, AC 1 minute		V_{dis}	KV	2	
Mounting torque @Recommend torque：5kg·cm		Tor	kg·cm	8	

■Electrical Characteristics（T_a=25℃ Unless otherwise specified）

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	RD8JC80	RD8JC100
Maximum reverse recovery time	t_{rr}	ns	I_F=0.5A,I_R=1.0A, I_{rr}=0.25A	500	
Maximum instantaneous forward voltage drop per diode	VF	V	IFM=4.0A	1.3	
Maximum DC reverse current at rated DC blocking voltage per diode	IR	μA	T_j =25℃	5	
			T_j =125℃	100	
Typical junction capacitance	Cj	pF	Measured at 1MHz and Applied Reverse Voltage of 4.0 V.D.C	47	

■Thermal Characteristics （T_a=25℃ Unless otherwise specified）

PARAMETER		SYMBOL	UNIT	RD8JC80	RD8JC100
Thermal resistance	Between junction and ambient, Without heatsink	$R_{\theta J-A}$	℃/W	35.0	
	Between junction and case, With heatsink	$R_{\theta J-C}$		1.5	

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

■ Characteristics (Typical)

FIG1:Io-Tc Curve

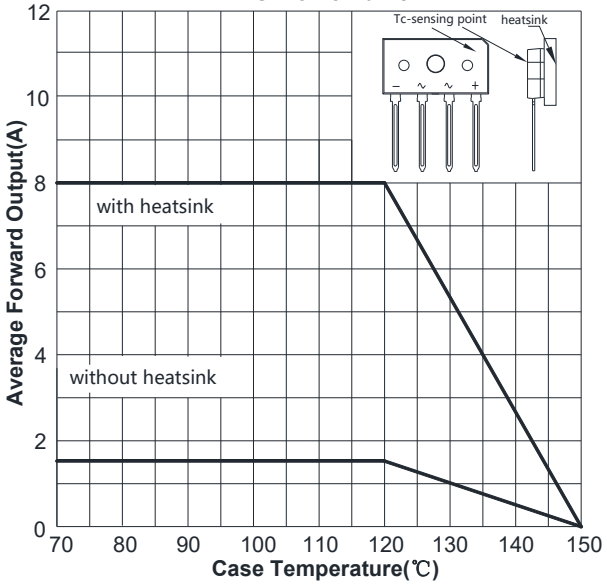


FIG2:Surge Forward Current Capability

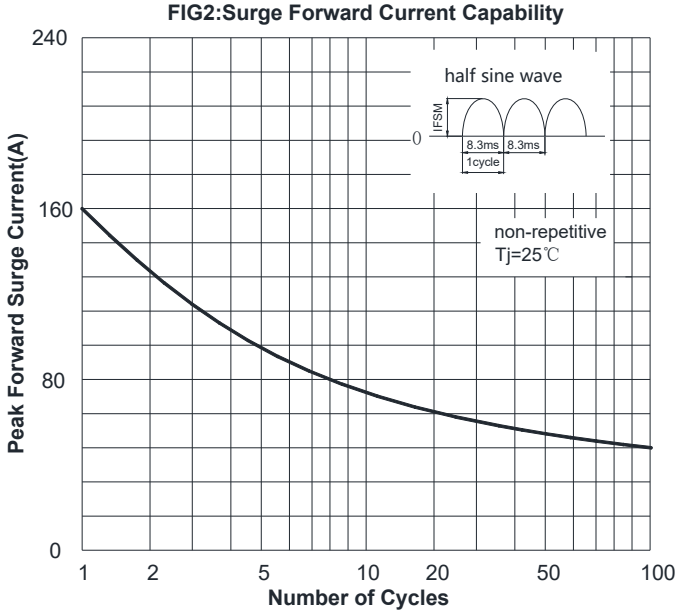


FIG3: Typical Forward Voltage

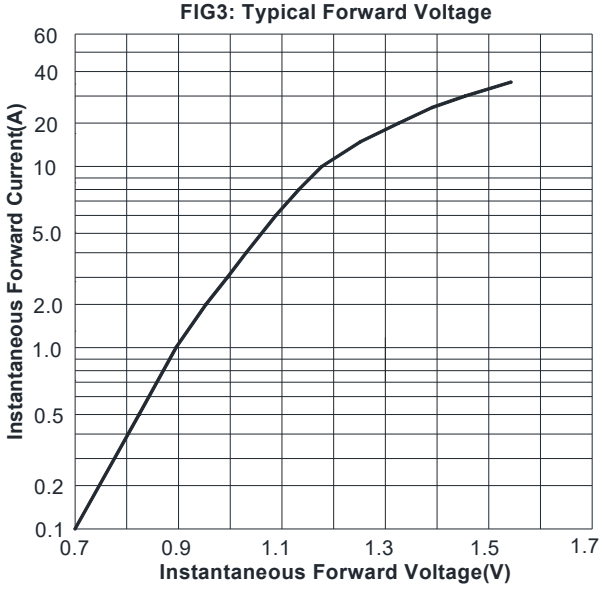


FIG4:Typical Reverse Characteristics

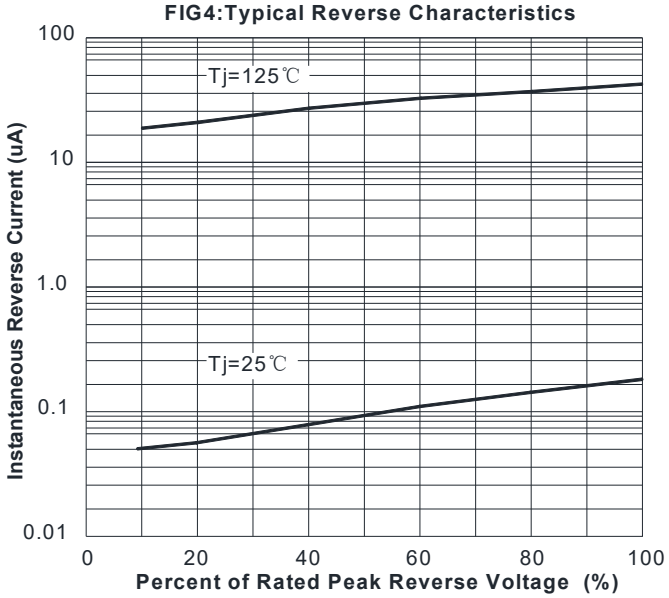
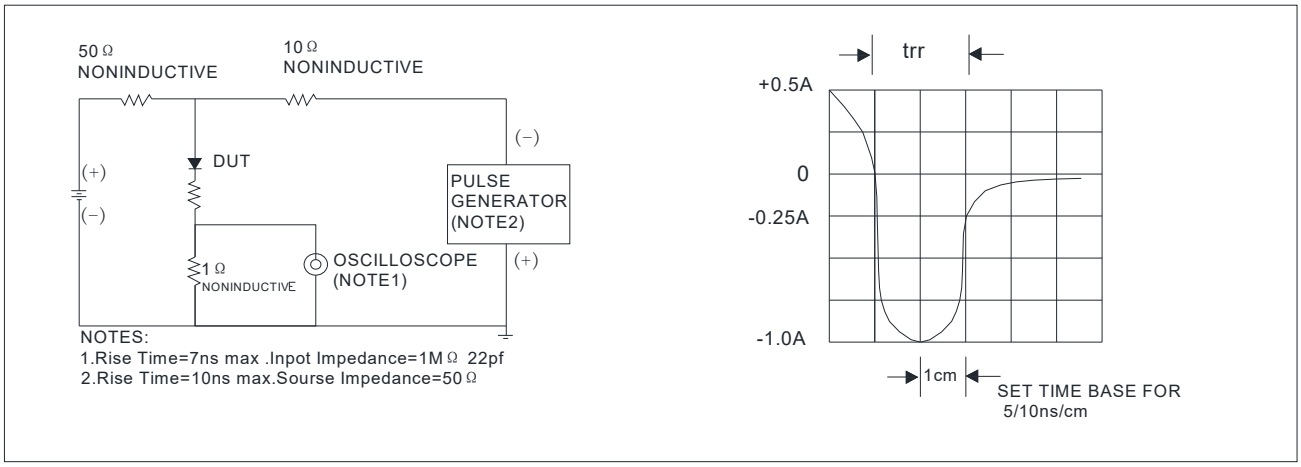
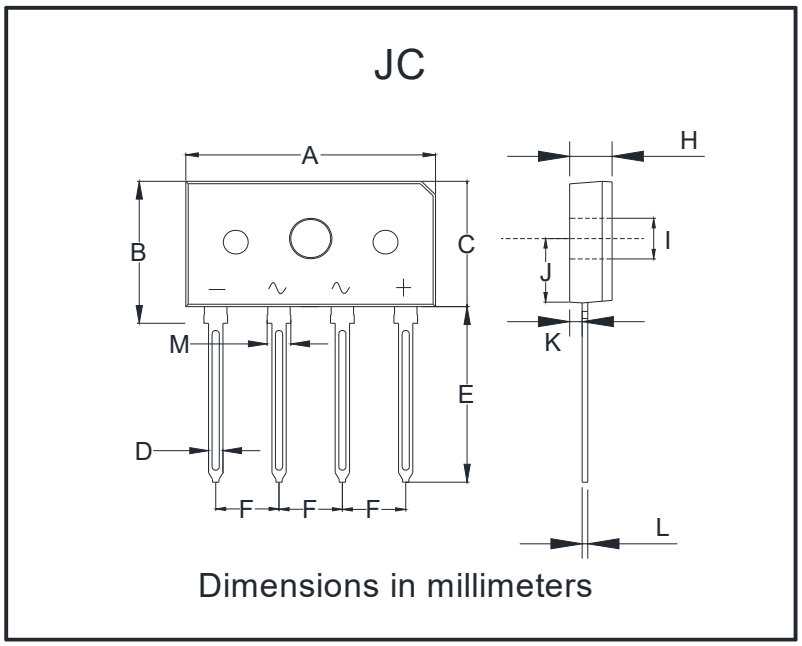


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time



■ 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

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