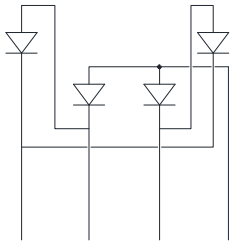
Fast Recovery Bridge Rectifiers



Features

- UL recognition, file #E230084
- Glass passivated chip junction
- Ideal for printed circuit boards
- 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**: GBP
  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_a=25 Unless otherwise specified

PARAMETER	SYMBOL	UNIT	RGBP41
Average rectified output current @ 60Hz sine wave, R-load, T_a=110	I_O	A	4.0
Forward Surge Current (Non-repetitive) @60Hz Half-sine wave,1 cycle, Tj=25	I_{FSM}	A	110
Forward Surge Current (Non-repetitive) @1ms, square wave, 1 cycle, Tj=25			220
Current squared time @1ms≤t≤8.3ms Tj=25 , Rating of per diode	I^2t	A^2s	50
Dielectric strength @ terminals to case, AC 1 minute	Vdis	KV	2
Storage temperature	T_{stg}		-55 ~ +150
Junction temperature	T_j		-55 ~ +150

■Electrical Characteristics T_a=25 Unless otherwise specified

PARAMETER	SYMBOL	UNIT	TEST CONDITIONS	RGBP410
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=2.0A	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	30

■Thermal Characteristics T_a=25 Unless otherwise specified

PARAMETER		SYMBOL	UNIT	RGBP410
Thermal Resistance	Between junction and ambient	$R_{\theta J-A}$	/W	45
	Between junction and Case	$R_{\theta J-C}$		5

■Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIIMUM PACKAGE(pcs)	> Ć ˈl

FIG3: Typical Forward Voltage

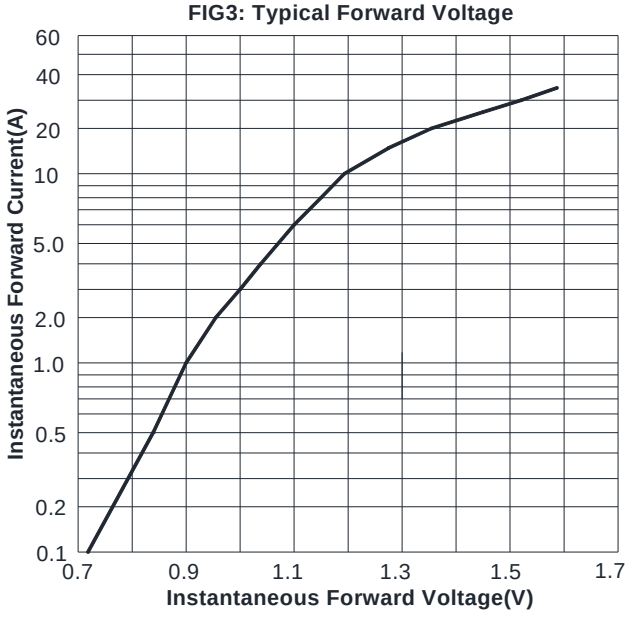


FIG4:Typical Reverse Characteristics

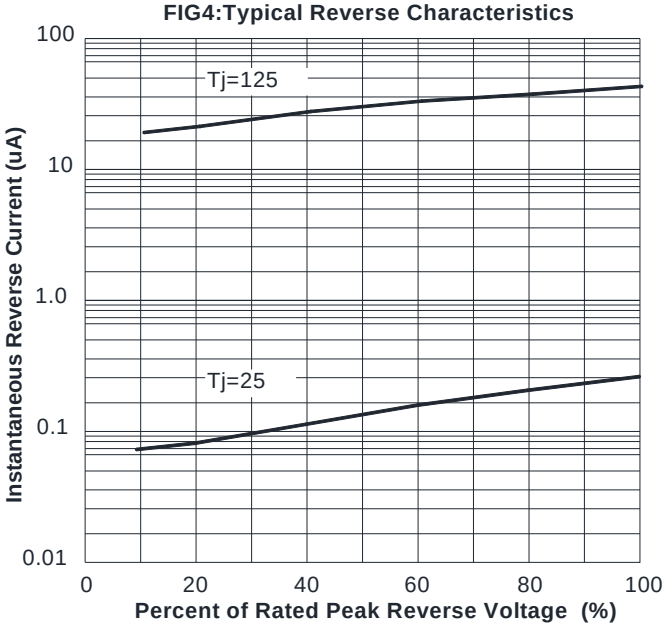
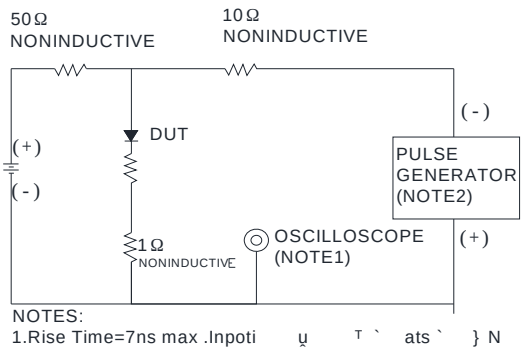
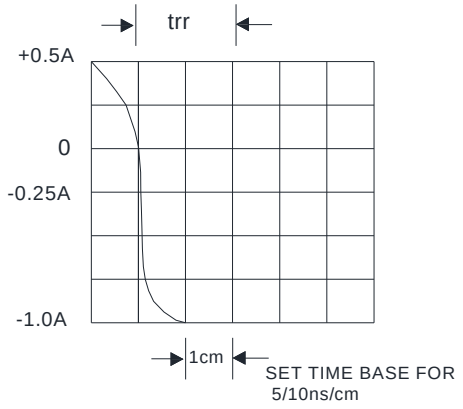


FIG.5: Diagram of circuit and Testing wave form of reverse recovery time





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