

RKBPC10, 15, 25, 35/W

10, 15, 25, 35A FAST RECOVERY BRIDGE RECTIFIER

Features

- Diffused Junction
- Low Reverse Leakage Current
- Fast Switching, High Efficiency
- Electrically Isolated Epoxy Case for Maximum Heat Dissipation
- Case to Terminal Isolation Voltage 2500V

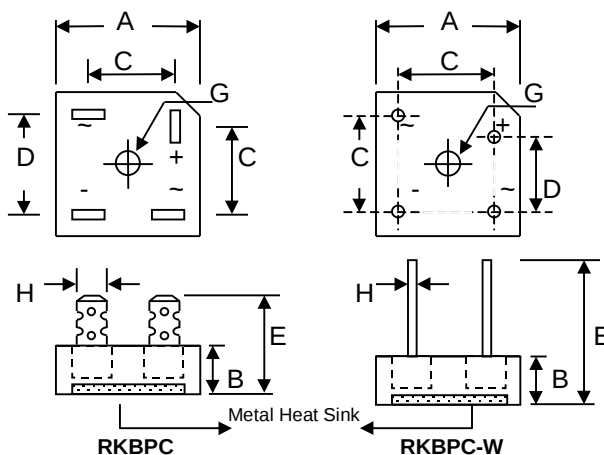
Mechanical Data

- Case: Epoxy Case with Heat Sink Internally Mounted in the Bridge Encapsulation
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Symbols Marked on Case
- Mounting: Through Hole for #10 Screw
- Weight: RKBPC 24 grams (approx.)
RKBPC-W 21 grams (approx.)
- Marking: Type Number

"W" Suffix Designates Wire Leads

No Suffix Designates Faston Terminals

*All Models are Available on B(Height)=7.9mm Max. Epoxy Case



	RKBPC		RKBPC-W	
Dim	Min	Max	Min	Max
A	28.40	28.70	28.40	28.70
B	10.97	11.23	10.97	11.23
C	15.70	16.70	17.10	19.10
D	17.50	18.50	10.90	11.90
E	22.86	25.40	30.50	—
G	Hole for #10 screw, 5.08Ø Nominal			
H	6.35 Typical		0.97Ø	1.07Ø
All Dimension in mm				

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Single Phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

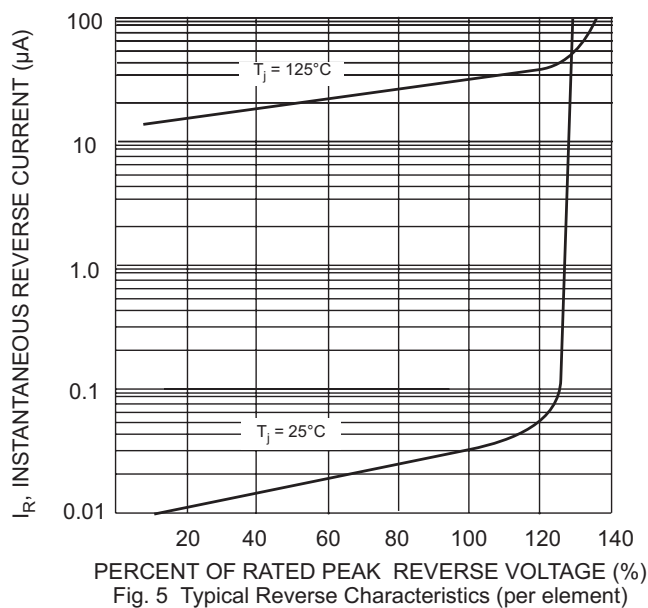
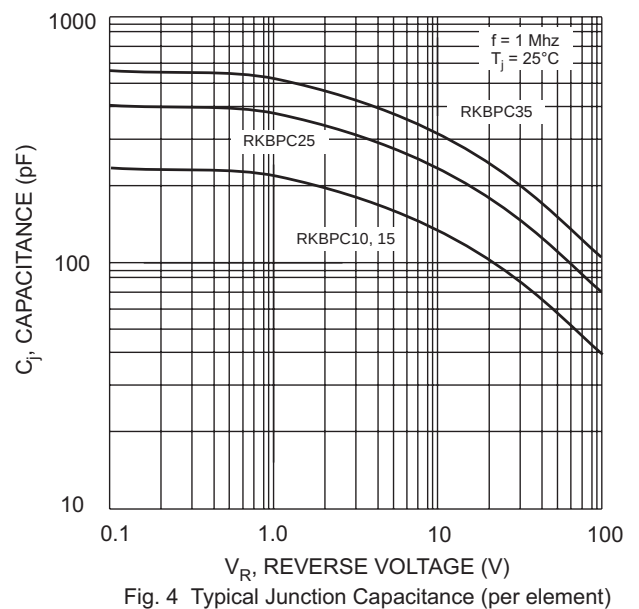
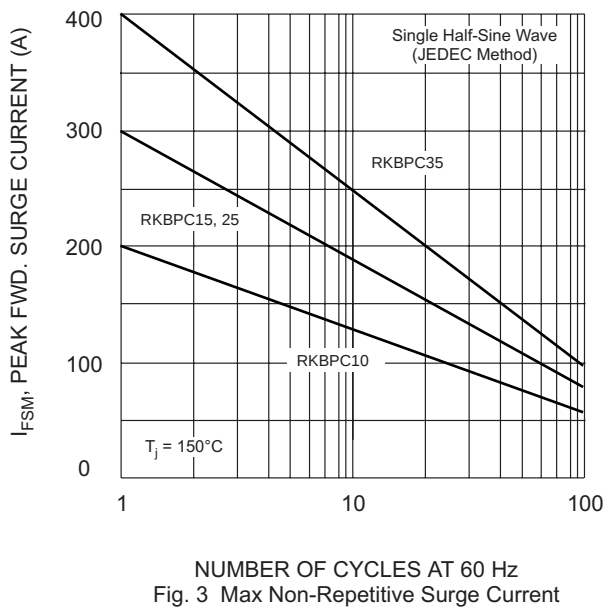
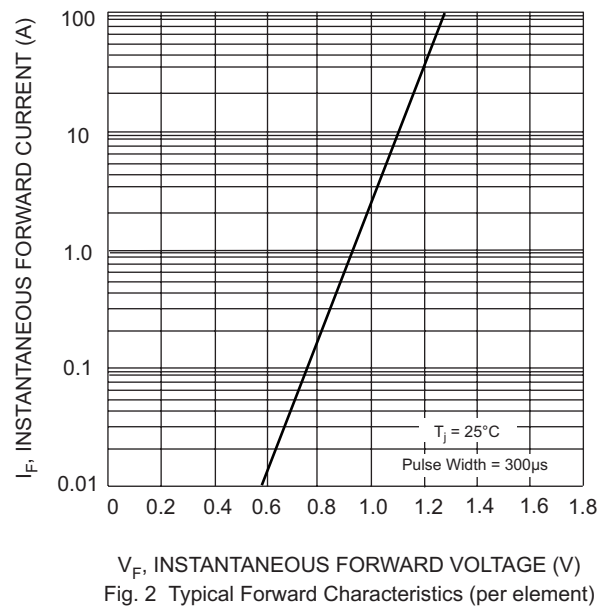
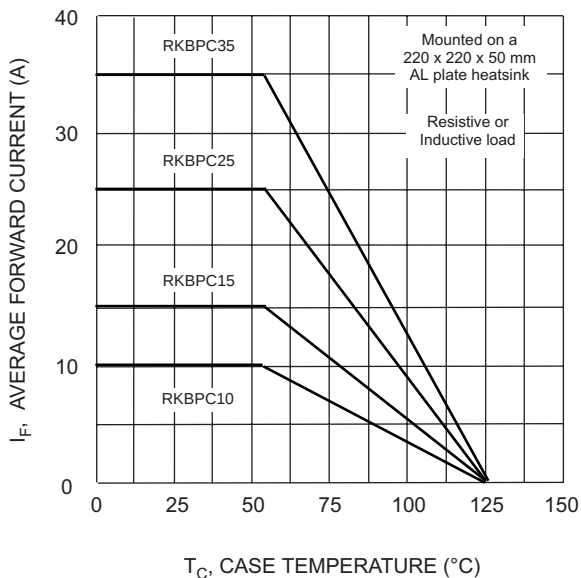
Characteristics	Symbol	-00/W	-01/W	-02/W	-04/W	-06/W	-08/W	-10/W	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{VRM} V _R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectifier Output Current @T _C = 55°C	RKBPC10/W RKBPC15/W RKBPC25/W RKBPC35/W I _O	10 15 25 35							A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave Superimposed on rated load (JEDEC Method)	RKBPC10/W RKBPC15/W RKBPC25/W RKBPC35/W I _{FSM}	200 300 300 400							A
Forward Voltage Drop (per element)	RKBPC10/W @I _F = 5.0A RKBPC15/W @I _F = 7.5A RKBPC25/W @I _F = 12.5A RKBPC35/W @I _F = 17.5A V _{FM}	1.3							V
Peak Reverse Current At Rated DC Blocking Voltage	@T _C = 25°C @T _C = 125°C I _{RM}	10 500							µA
Reverse Recovery Time (Note 1)	t _{rr}	150		250		500			nS

Maximum Ratings and Electrical Characteristics @T_A=25°C unless otherwise specified

Typical Junction Capacitance (per element) (Note 2)	RKBPC10/W RKBPC15/W RKBPC25/W RKBPC35/W	C _j	200 200 300 400	pF
Typical Thermal Resistance Junction to Case (per element) (Note 3)	RKBPC10/W RKBPC15/W RKBPC25/W RKBPC35/W	R _{θJC}	6.3 6.3 3.8 3.8	K/W
RMS Isolation Voltage from Case to Lead		V _{ISO}	2500	V
Operating and Storage Temperature Range		T _j , T _{STG}	-65 to +125	°C

***Glass Passivated forms are available upon request.**

Note: 1. Measured at I_F = 0.5A, I_R = 1.0A, I_{RR} = 0.25A.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
3. Thermal resistance junction to case mounted on heatsink.



ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
RKBPCxx00	Square Bridge	50 Units/Box
RKBPCxx00W	Square Bridge	50 Units/Box
RKBPCxx01	Square Bridge	50 Units/Box
RKBPCxx01W	Square Bridge	50 Units/Box
RKBPCxx02	Square Bridge	50 Units/Box
RKBPCxx02W	Square Bridge	50 Units/Box
RKBPCxx04	Square Bridge	50 Units/Box
RKBPCxx04W	Square Bridge	50 Units/Box
RKBPCxx06	Square Bridge	50 Units/Box
RKBPCxx06W	Square Bridge	50 Units/Box
RKBPCxx08	Square Bridge	50 Units/Box
RKBPCxx08W	Square Bridge	50 Units/Box
RKBPCxx10	Square Bridge	50 Units/Box
RKBPCxx10W	Square Bridge	50 Units/Box

Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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