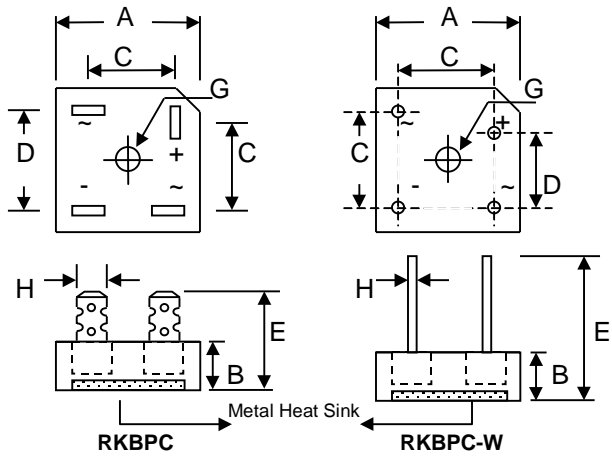


### Features

- 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



Dim	RKBPC		RKBPC-W	
	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				

"W" Suffix Designates Wire Leads

No Suffix Designates Faston Terminals

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

### Maximum Ratings and Electrical Characteristics @ $T_A=25^\circ\text{C}$ 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	$V_{RRM}$	50	100	200	400	600	800	1000	V
Working Peak Reverse Voltage	$V_{RWM}$								
DC Blocking Voltage	$V_R$								
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectifier Output Current @ $T_C = 55^\circ\text{C}$	$I_O$				10 15 25 35				A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave Superimposed on rated load (JEDEC Method)	$I_{FSM}$				200 300 300 400				A
Forward Voltage Drop (per element)	$V_{FM}$				1.3				V
Peak Reverse Current	$I_{RM}$				10 500				$\mu\text{A}$
At Rated DC Blocking Voltage									
Reverse Recovery Time (Note 1)	$t_{rr}$		150			250	500		nS

## Maximum Ratings and Electrical Characteristics @T<sub>A</sub>=25°C unless otherwise specified

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

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

- Note: 1. Measured at I<sub>F</sub> = 0.5A, I<sub>R</sub> = 1.0A, I<sub>RR</sub> = 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.

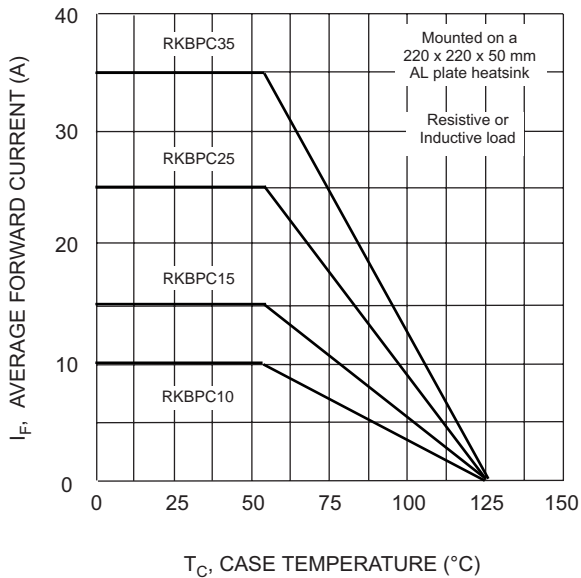


Fig. 1 Forward Current Derating Curve

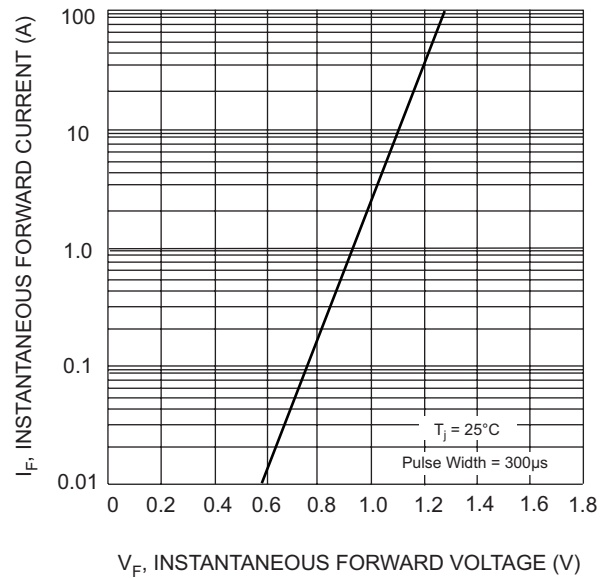


Fig. 2 Typical Forward Characteristics (per element)

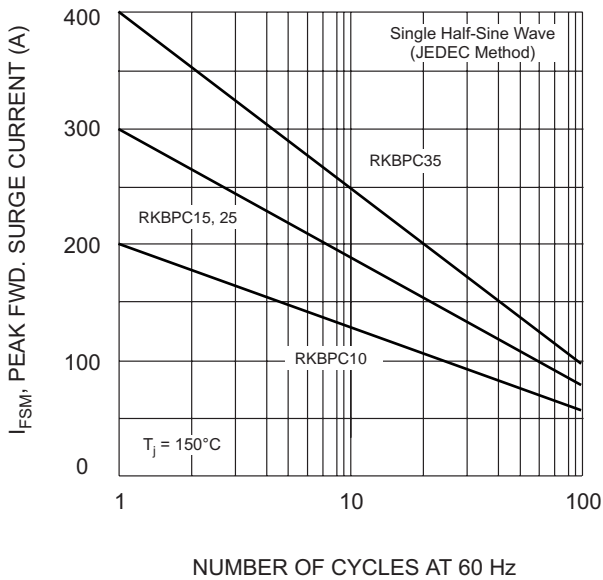


Fig. 3 Max Non-Repetitive Surge Current

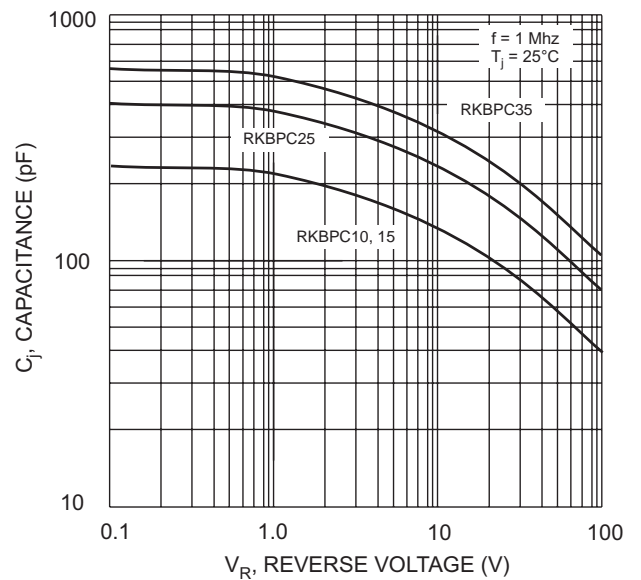


Fig. 4 Typical Junction Capacitance (per element)

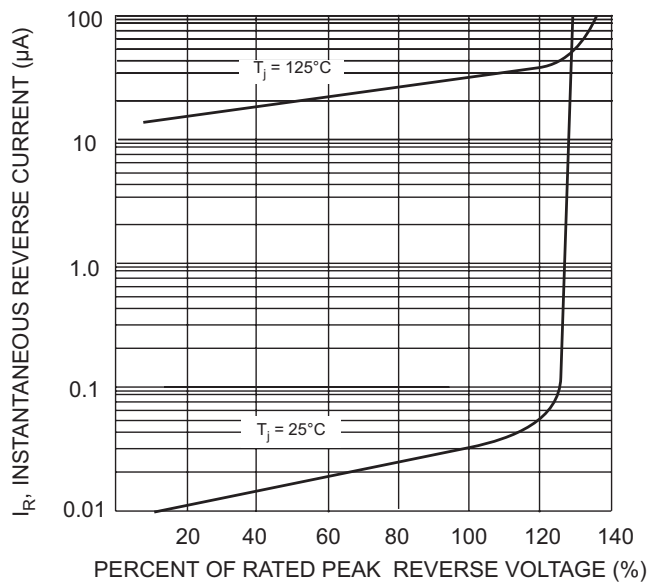


Fig. 5 Typical Reverse Characteristics (per element)

## 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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