

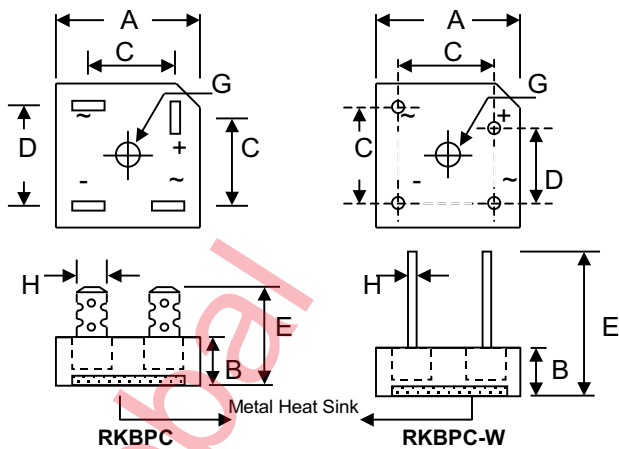
Data sheet 1323 Rev.—

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 #8 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 #8 screw, 4.90Ø 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)=7.62mm Max. Epoxy Case

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	V _{RRM}								
Working Peak Reverse Voltage	V _{RWM}	50	100	200	400	600	800	1000	V
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°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 At Rated DC Blocking Voltage	I _{RM}				10 500				µA
Reverse Recovery Time (Note 1)	t _{rr}		150			250	500		nS

Maximum Ratings and Electrical Characteristics @ $T_A=25^{\circ}\text{C}$ unless otherwise specified

Typical Junction Capacitance (per element) (Note 2)	RKBPC10/W	C_j	200	pF
	RKBPC15/W		200	
	RKBPC25/W		300	
	RKBPC35/W		400	
Typical Thermal Resistance Junction to Case (per element) (Note 3)	RKBPC10/W	$R_{\theta JC}$	6.3	K/W
	RKBPC15/W		6.3	
	RKBPC25/W		3.8	
	RKBPC35/W		3.8	
RMS Isolation Voltage from Case to Lead		V_{ISO}	2500	V
Operating and Storage Temperature Range		T_j, T_{STG}	-65 to +125	$^{\circ}\text{C}$

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

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

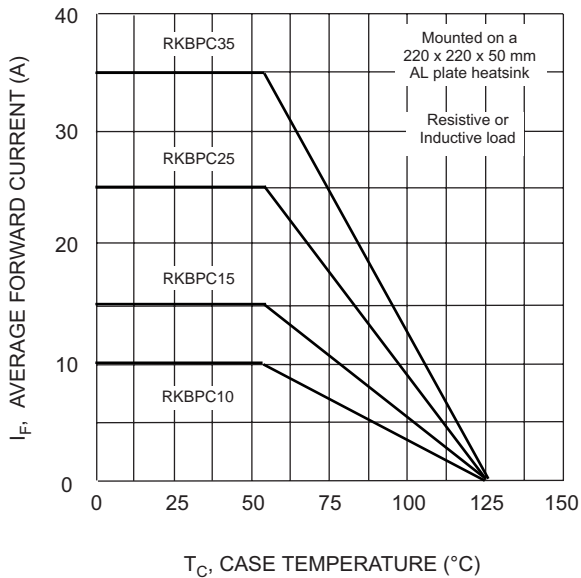


Fig. 1 Forward Current Derating Curve

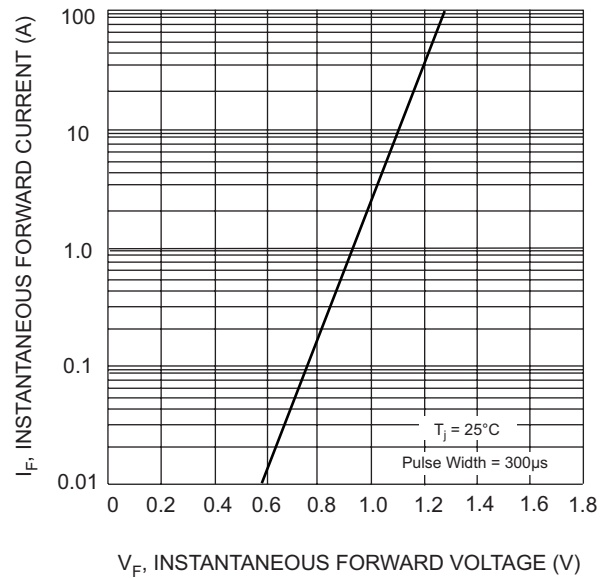


Fig. 2 Typical Forward Characteristics (per element)

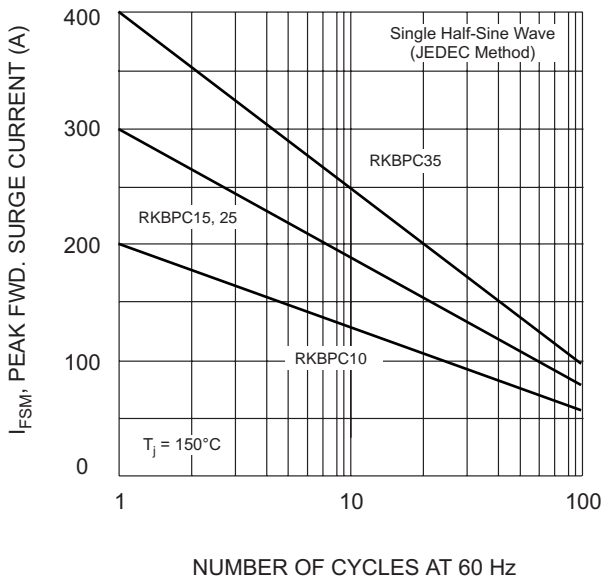


Fig. 3 Max Non-Repetitive Surge Current

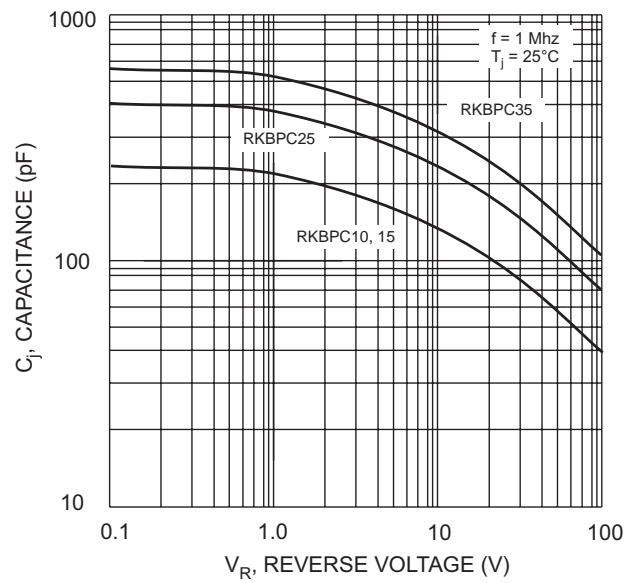


Fig. 4 Typical Junction Capacitance (per element)



Fig. 5 Typical Reverse Characteristics (per element)