

Data sheet 1298 Rev.—

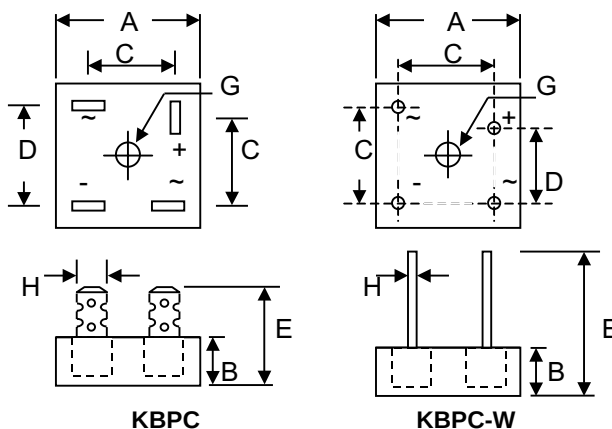
Features

- Diffused Junction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Electrically Isolated Metal Case for Maximum Heat Dissipation
- Case to Terminal Isolation Voltage 2500V

Mechanical Data

- Case: Metal Case with Electrically Isolated Epoxy
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Symbols Marked on Case
- Mounting: Through Hole for #8 Screw
- Weight: KBPC 31.6 grams (approx.)
KBPC-W 28.5 grams (approx.)
- Marking: Type Number

"W" Suffix Designates Wire Leads
No Suffix Designates Faston Terminals



Dim	KBPC				KBPC-W			
	Min	Max	Min	Max	Min	Max	Min	Max
A	28.40	28.7	1.118	1.130	28.40	28.7	1.118	1.130
B	10.97	11.23	0.432	0.442	10.97	11.23	0.432	0.442
C	15.70	16.70	0.618	0.657	17.10	19.10	0.673	0.752
D	17.50	18.50	0.689	0.728	10.90	11.90	0.429	0.469
E	22.86	25.40	0.90	1.00	30.50	—	1.201	—
G	Hole for #8 screw, 4.90mm(0.193inch)ØNormina							
H	6.35 Typical		0.25 Typical		0.97Ø		1.07Ø	
	In mm		In inch		In mm		In inch	

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 _{RWM} 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 = 60°C	I _O	15 25 35							A
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave Superimposed on rated load (JEDEC Method)	I _{FSM}	300 400 400							A
Forward Voltage Drop (per element)	V _{FM}	KBPC15 @I _F = 7.5A KBPC25 @I _F = 12.5A KBPC35 @I _F = 17.5A 1.2							V
Peak Reverse Current At Rated DC Blocking Voltage	I _{RM}	@T _C = 25°C @T _C = 125°C 10 1.0							µA mA
I ² t Rating for Fusing (t < 8.3ms) (Note 1)	I ² t	KBPC15 KBPC25 KBPC35 373 373 664							A ² s

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

Typical Junction Capacitance (per element) (Note 2)	C _j	300	pF
Typical Thermal Resistance Junction to Case (per element) (Note 3)	R _{θJC}	KBPC15 6.3 KBPC25 3.8 KBPC35 2.7	K/W
RMS Isolation Voltage from Case to Lead	V _{ISO}	2500	V
Operating and Storage Temperature Range	T _J , T _{STG}	-65 to +150	°C

* Glass passivated forms are available upon request.

Note: 1. Measured at non-repetitive, for t > 1ms and < 8.3ms.

2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

3. Thermal resistance junction to case mounted on heatsink.

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