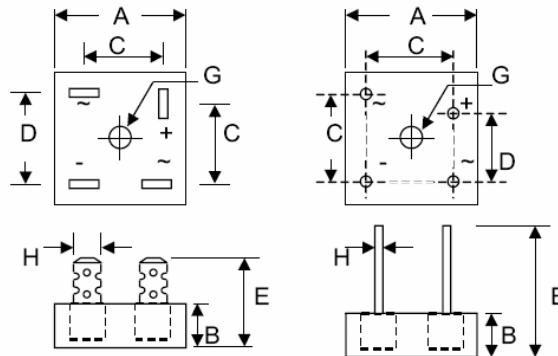




Technical Data
Data Sheet N0514, Rev.-
Features

- Diffused Junction
- Low Reverse Leakage Current
- Low Power Loss, High Efficiency
- Electrically Isolated Epoxy Case for Maximum Heat Dissipation
- Case to Terminal Isolation Voltage 2500V
- UL Recognized File # E223064
- This is a Pb - Free Device
- All SMC parts are traceable to the wafer lot
- Additional testing can be offered upon request



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: KBPC 31.6 grams (approx.)
KBPC-W 28.5 grams (approx.)
 - Marking: Part Name, SSG and Date Code
- "W" Suffix Designates Wire Leads
No Suffix Designates Faston Terminals
- *All Models are Available on B(Height)=7.62mm Max. Epoxy Case

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)ØNomina							
H	6.35 Typical	0.25 Typical		0.97Ø	1.07Ø	0.038Ø	0.042Ø	
	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%.

Characteristic	Symbol	KBPC 1000/W	KBPC 1001/W	KBPC 1002/W	KBPC 1004/W	KBPC 1006/W	KBPC 1008/W	KBPC 1010/W	Unit
Peak Repetitive Reverse Voltage	V _{RRM}								V
Working Peak Reverse Voltage	V _{RWM}	50	100	200	400	600	800	1000	
DC Blocking Voltage	V _R								
RMS Reverse Voltage	V _{R(RMS)}	35	70	140	280	420	560	700	V
Average Rectified Output Current @T _A = 50°C	I _o	10							A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	200							A
Forward Voltage (per element) @I _F = 5.0A	V _{FM}	1.2							V
Peak Reverse Current @T _C = 25°C At Rated DC Blocking Voltage @T _C = 125°C	I _{RM}	10 1.0							μA mA
Typical Junction Capacitance (Note 1)	C _j	300							pF
Typical Thermal Resistance (Note 2)	R _{θJC}	6.3							K/W
RMS Isolation Voltage from Case to Lead	V _{iso}	2500							V
Operating and Storage Temperature Range	T _i , T _{stg}	-65 to +150							°C

* Glass passivated forms are available upon request.

Note: 1. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.

2. Thermal resistance junction to case per element mounted on heatsink.



Technical Data
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Green Products

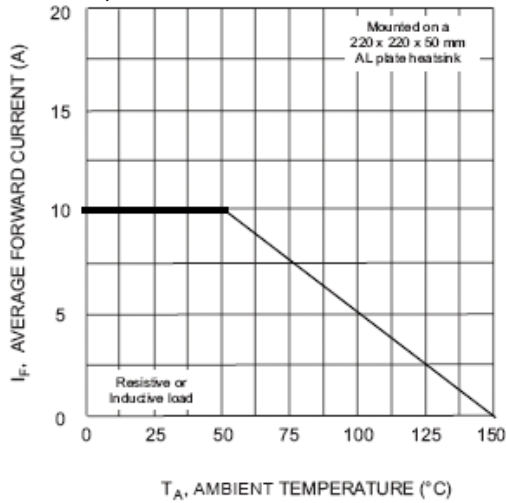


Fig. 1 Forward Current Derating Curve

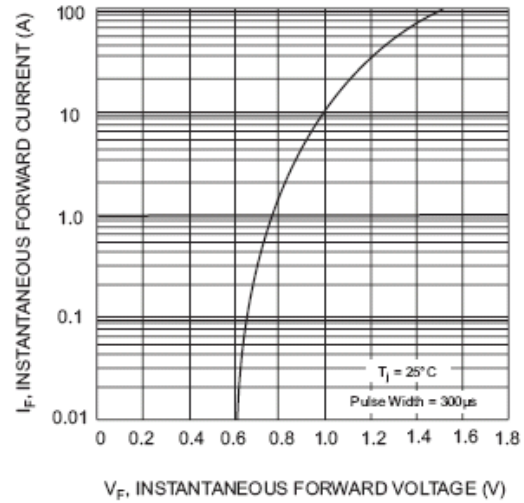


Fig. 2 Typical Forward Characteristics (per element)

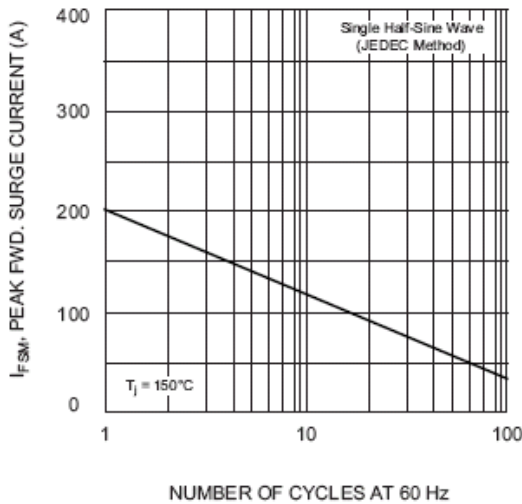


Fig. 3 Max Non-Repetitive Surge Current

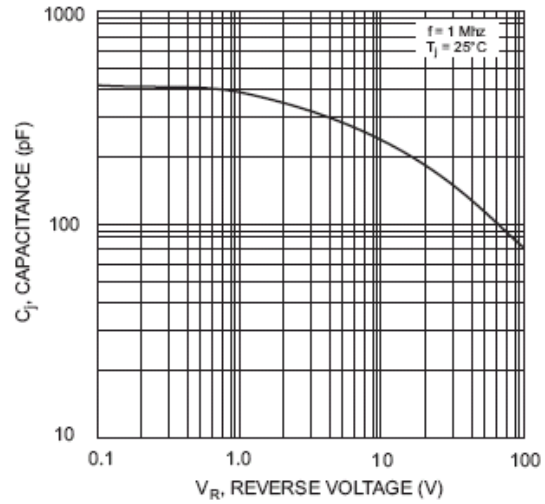


Fig. 4 Typical Junction Capacitance (per element)

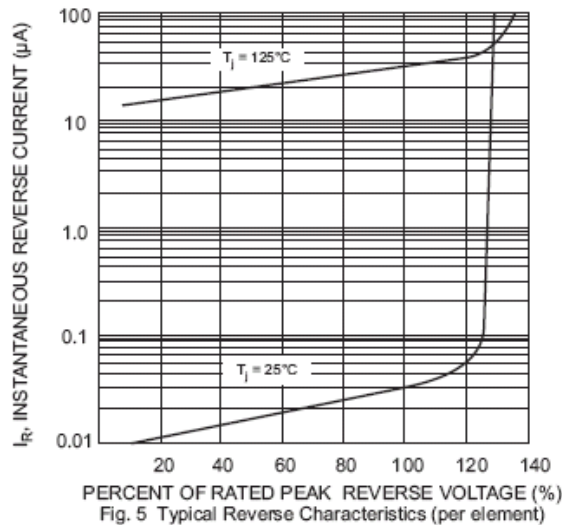


Fig. 5 Typical Reverse Characteristics (per element)

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