

SENSITRON

SEMICONDUCTOR

B40C5000/3300 – B380C5000/3300

5.0A BRIDGE RECTIFIER

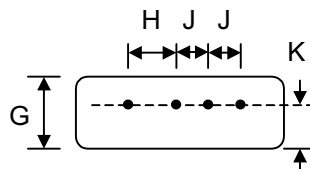
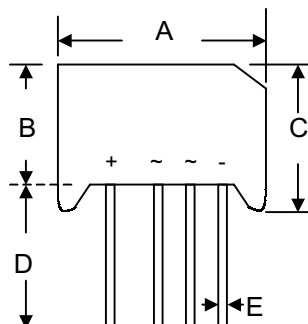
Data Sheet 1293 Rev.A

Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- Ideal for Printed Circuit Boards
- UL Recognized File # E223064

Mechanical Data

- Case: Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 25.3 grams (approx.)
- Mounting Position: Any
- Marking: Type Number



RS-5					
Dim	Min	Max	Min	Max	
A	39.40	40.10	1.55	1.58	
B	20.20	21.00	0.795	0.827	
C	21.00	21.70	0.827	0.854	
D	25.40	—	1	—	
E	0.97Ø	1.07Ø	0.038Ø	0.042Ø	
G	6.20	6.70	0.244	0.264	
H	9.80	10.20	0.386	0.402	
J	7.20	7.60	0.283	0.299	
K	4.60	5.00	0.181	0.197	
	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	B40C5000/ 3300	B80C5000/ 3300	B125C5000/ 3300	B250C5000/ 3300	B380C5000/ 3300	Unit
Peak Repetitive Reverse Voltage	V _{RRM}						
Working Peak Reverse Voltage	V _{RWM}	100	200	300	600	900	V
DC Blocking Voltage	V _R						
Recommend Input Voltage	V _{RMS}	40	80	125	250	380	V
Average Rectified Output Current @T _A = 45°C (Note 1)	I _O	5.0					A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	250					A
Repetitive Peak Forward Surge Current	I _{FRM}	30					A
Forward Voltage (per element) @I _F = 5.0A	V _{FM}	1.1					V
Peak Reverse Current @T _C = 25°C	I _R	10					µA
At Rated DC Blocking Voltage @T _C = 150°C		6.0					mA
Rating for Fusing (t < 8.3ms) (Note 2)	I ² _t	312					A ² s
Operating and Storage Temperature Range	T _j , T _{STG}	-55 to +150					°C

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

Note: 1. Measured at 200cm² chasis, C-load, T_A = 45°C.

2. Non-repetitive for t > 1ms and < 8.3ms.

Data Sheet 1293 Rev.A

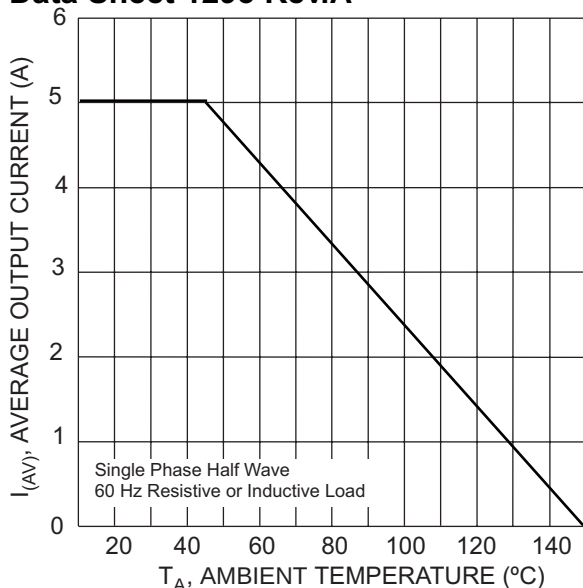


Fig. 1 Forward Current Derating Curve

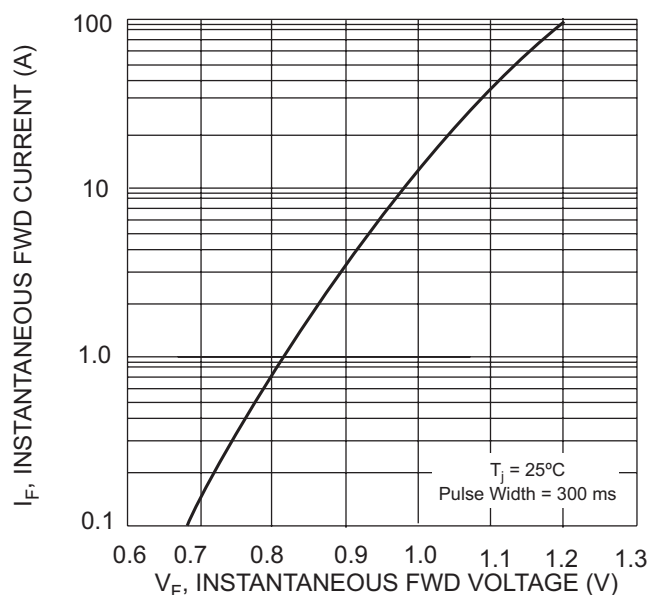


Fig. 2 Typical Forward Characteristics, per element

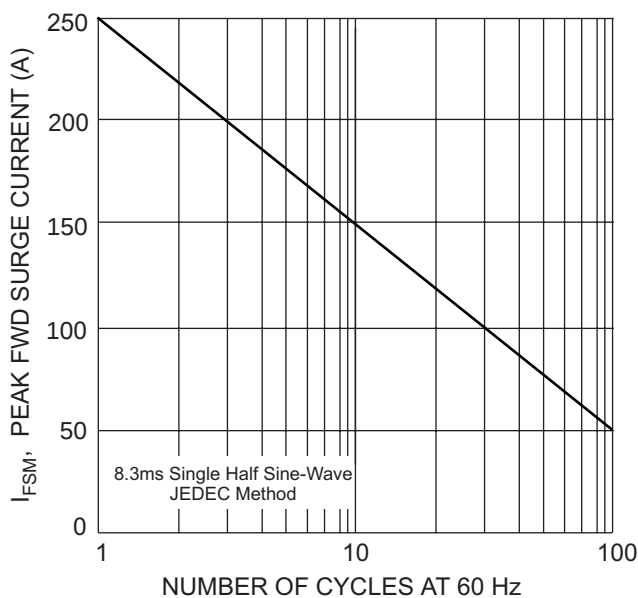


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

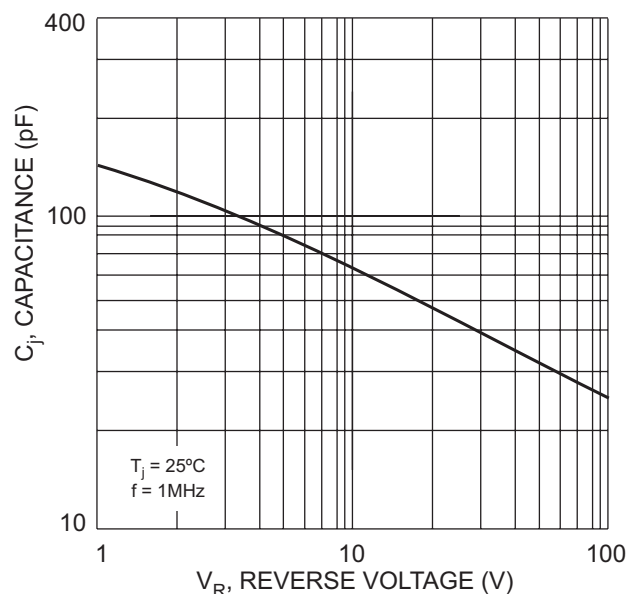


Fig. 4 Typical Junction Capacitance Per Element

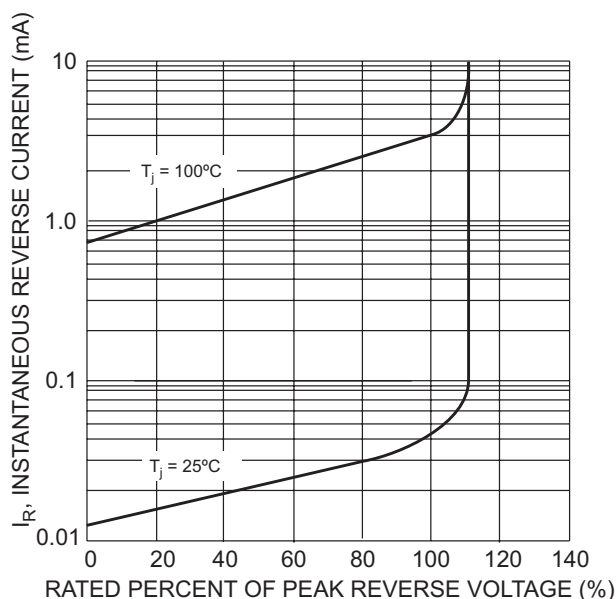


Fig. 5 Typical Reverse Characteristics