

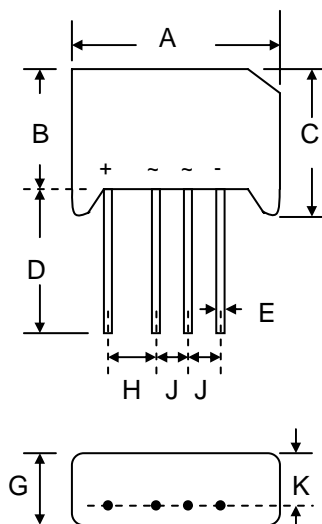
5.0A SINGLE-PHASE BRIDGE RECTIFIER

Features

- Diffused Junction
- Low Forward Voltage Drop
- High Current Capability
- High Reliability
- High Surge Current Capability
- High Case Dielectric Strength
- Ideal for Printed Circuit Boards

Mechanical Data

- Case: RS-5, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: As Marked on Body
- Weight: 9.8 grams (approx.)
- Mounting Position: Any
- Marking: Type Number
- **Lead Free: For RoHS / Lead Free Version, Add “-LF” Suffix to Part Number, See Page 4**



RS-5		
Dim	Min	Max
A	39.40	40.50
B	20.50	21.50
C	21.00	22.50
D	25.40	—
E	0.97 Ø	1.07 Ø
G	6.50	7.50
H	9.00	10.20
J	7.20	7.60
K	4.60	5.00
All Dimensions in mm		

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	B40C 5000/3300	B80C 5000/3300	B125C 5000/3300	B250C 5000/3300	B380C 5000/3300	B500C 5000/3300	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V _{RRM} V _{RWM} V _R	100	200	300	600	900	1000	V
Recommend Input Voltage	V _{RMS}	40	80	125	250	380	500	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 leg @I _F = 5.0A	V _{FM}	1.0						V
Peak Reverse Current @T _C = 25°C At Rated DC Blocking Voltage @T _C = 125°C	I _R	10 6.0						µA mA
Rating for Fusing (t < 8.3ms) (Note 2)	I _t ²	110						A ² s
Typical Thermal Resistance per leg (Note 1)	R _{θJA}	2.6						°C/W
Operating and Storage Temperature Range	T _j , T _{STG}	-55 to +150						°C

Note: 1. Mounted on 200mm² metal chassis.
 2. Non-repetitive for t > 1ms and < 8.3ms.

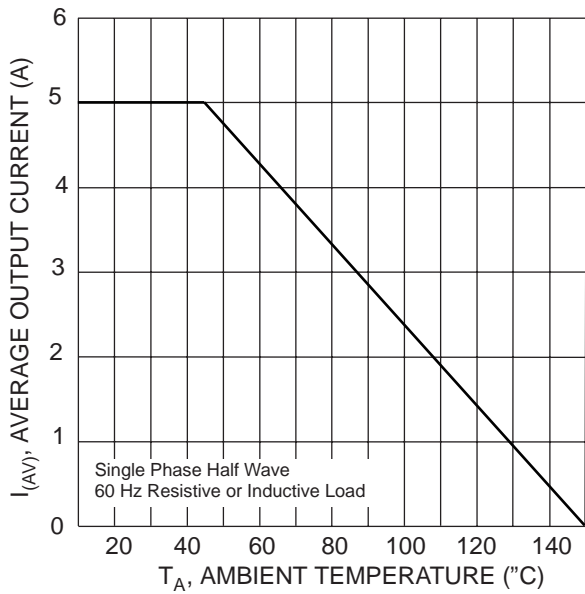


Fig. 1 Forward Current Derating Curve

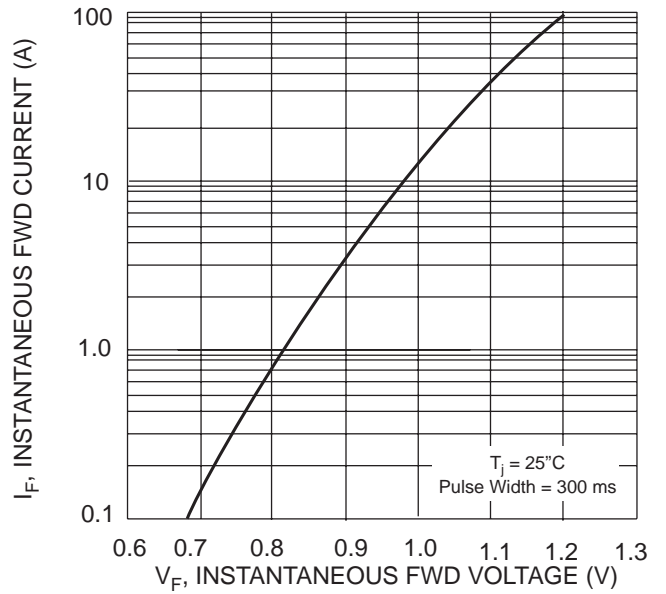


Fig. 2 Typical Forward Characteristics, per element

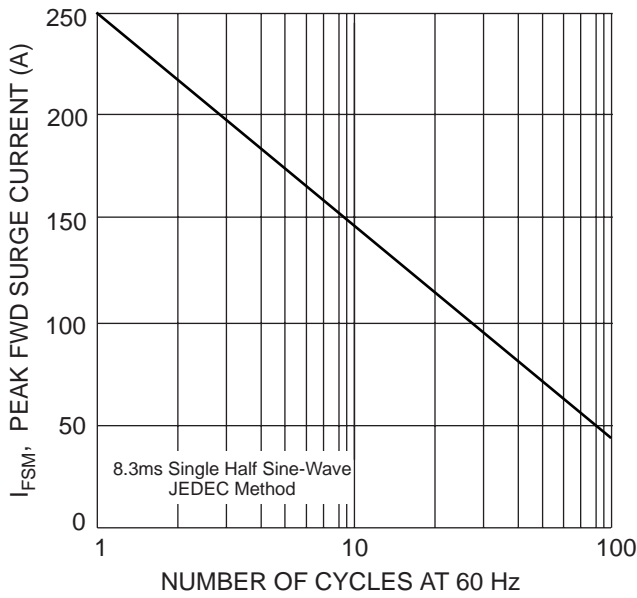


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

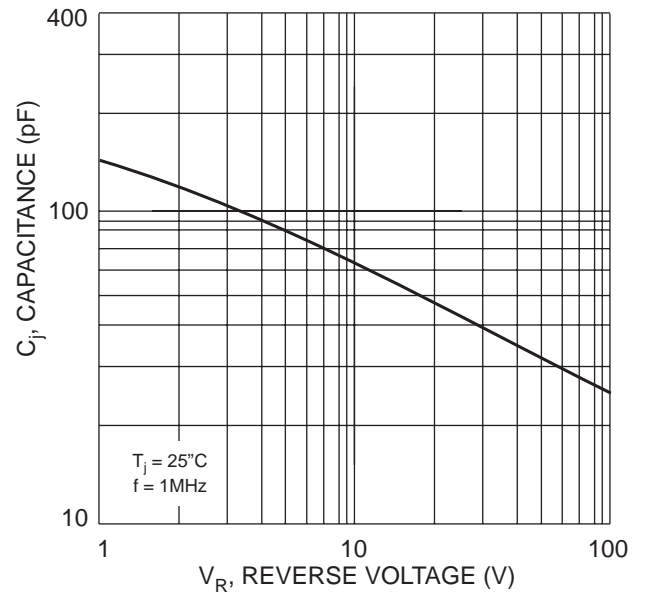


Fig. 4 Typical Junction Capacitance Per Element

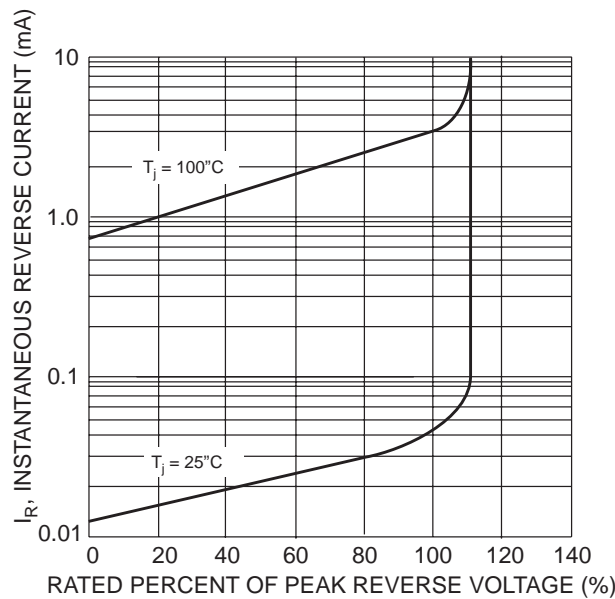
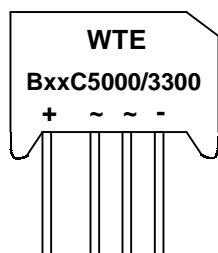


Fig. 5 Typical Reverse Characteristics

MARKING INFORMATION



WTE	= Manufacturer's Logo
BxxC5000/3300	= Device Number
xx	= 40, 80, 125, 250, 380, 500
Polarity	= As Marked on Body

PACKAGING INFORMATION

BULK

Inner Box Size L x W x H (mm)	Quantity (PCS)	Carton Size L x W x H (mm)	Quantity (PCS)	Approx. Gross Weight (KG)
230 x 230 x 56	200	500 x 255 x 275	2,000	23.0

Note: 1. Paper box, white or brown color.

ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
B40C5000/3300	SIL Bridge	200 Units/Box
B80C5000/3300	SIL Bridge	200 Units/Box
B125C5000/3300	SIL Bridge	200 Units/Box
B250C5000/3300	SIL Bridge	200 Units/Box
B380C5000/3300	SIL Bridge	200 Units/Box
B500C5000/3300	SIL Bridge	200 Units/Box

1. Shipping quantity given is for minimum packing quantity only. For minimum order quantity, please consult the Sales Department.
2. **To order Lead Free version (with Lead Free finish), add "-LF" suffix to part number above. For example, B40C5000/3300-LF.**

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WARNING: DO NOT USE IN LIFE SUPPORT EQUIPMENT. WTE power semiconductor products are not authorized for use as critical components in life support devices or systems without the express written approval.

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