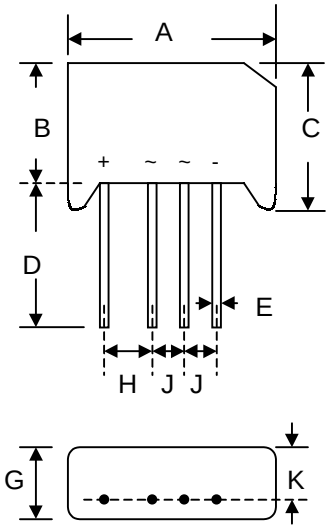
B40C3700/2200 – B500C3700/2200

RoHS

3.7A 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



RS-5		
Dim	**Min**	**Max**
A	39.40	40.10
B	20.20	21.00
C	21.00	21.70
D	25.40	—
E	0.97 Ø	1.07 Ø
G	6.20	6.70
H	9.80	10.20
J	7.20	7.60
K	4.60	5.00
All Dimensions in mm		

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**

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 3700/2200	B80C 3700/2200	B125C 3700/2200	B250C 3700/2200	B380C 3700/2200	B500C 3700/2200	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	3.7						A
Non-Repetitive Peak Forward Surge Current 8.3ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	150						A
Repetitive Peak Forward Surge Current	I_{FRM}	30						A
Forward Voltage per leg @I_F = 3.0A	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^2t	110						A^2s
Typical Thermal Resistance per leg (Note 1)	$R_{\theta JA}$	3.0						°C/W
Operating and Storage Temperature Range	T_j, T_{STG}	-55 to +150						°C

Note: 1. Mounted on 76 x 76 x 2.8mm Al. plate.
2. Non-repetitive for t > 1ms and < 8.3ms.

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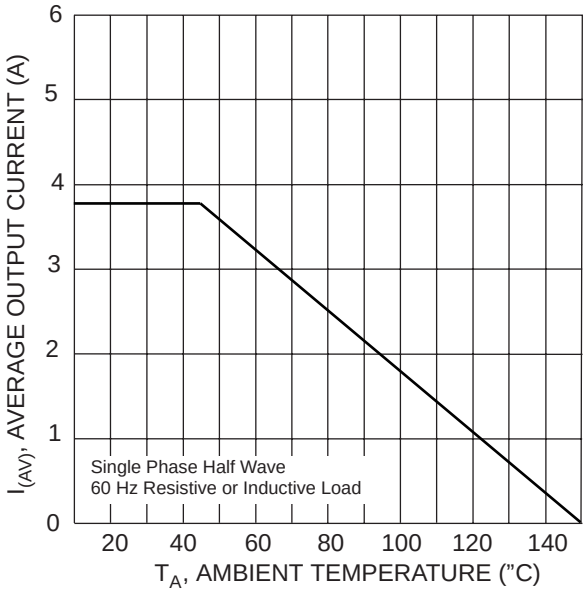


Fig. 1 Forward Current Derating Curve

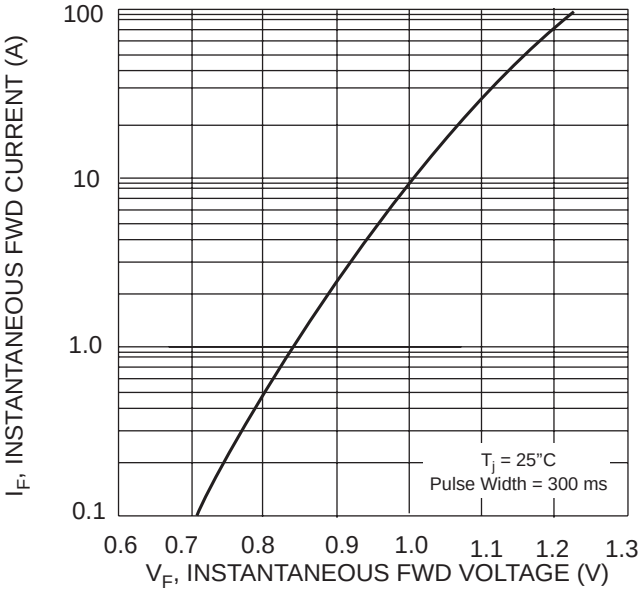


Fig. 2 Typical Forward Characteristics, per element

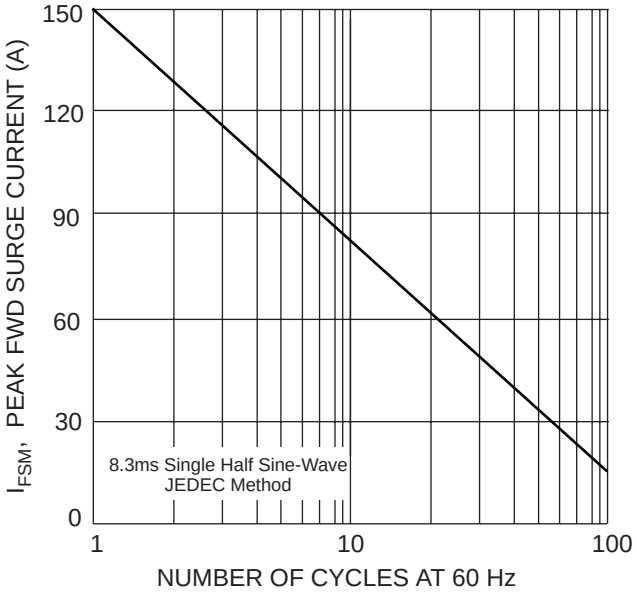


Fig. 3 Max Non-Repetitive Peak Fwd Surge Current

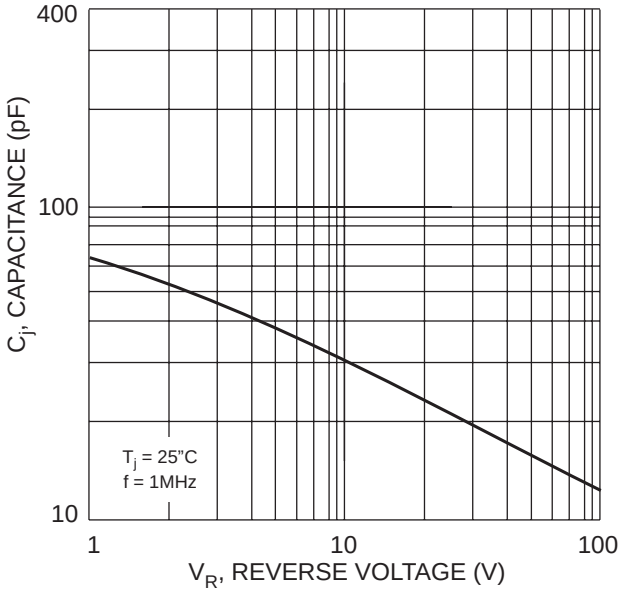


Fig. 4 Typical Junction Capacitance Per Element

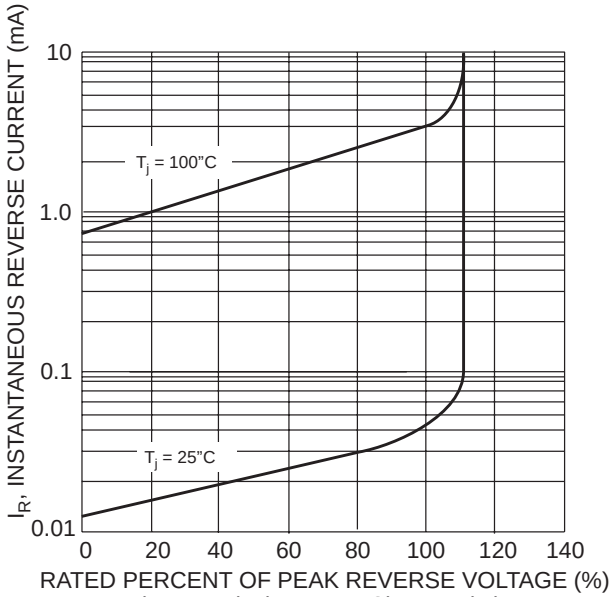
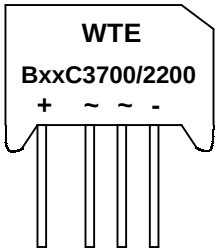


Fig. 5 Typical Reverse Characteristics

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MARKING INFORMATION



WTE	= Manufacturer's Logo
BxxC3700/2200	= 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.

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ORDERING INFORMATION

Product No.	Package Type	Shipping Quantity
B40C3700/2200	SIL Bridge	200 Units/Box
B80C3700/2200	SIL Bridge	200 Units/Box
B125C3700/2200	SIL Bridge	200 Units/Box
B250C3700/2200	SIL Bridge	200 Units/Box
B380C3700/2200	SIL Bridge	200 Units/Box
B500C3700/2200	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, B40C3700/2200-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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