



Features

- Diffused junction
- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Ideal for printed circuit boards

Mechanical Data

Case : Epoxy case with heat sink laterally mounted in the bridge encapsulation

Terminals : Plated leads solderable per MIL-STD-202, Method 208

Polarity : As Marked on Body Weight : 20 grams (approx.)

Mounting Position : Bolt down on heatsink with silicone thermal compound between bridge and mounting surface for maxi-

mum heat transfer efficiency.

: 20 in lbs. Max. Mounting Torque

Maximum Ratings And Electrical Characteristics

Rating at 25°C ambient temperature unless otherwise specified. Single phase, half wave, 60Hz, resistive or inductive load. For capacitive load, derate current by 20%

Voltage Ratings							11					
Characteristics	Symbol	SBR2500	SBR2501	SBR2502	SBR2504	SBR2506	SBR2508	SBR2510	SBR2512	SBR2514	SBR2516	Unit
Peak Repetitive Voltage Working Peak Reverse Voltage DC Blocking Voltage	VRRM VRWM VR	50	100	200	400	600	800	1000	1200	1400	1600	V
Peak Non-Repetitive Reverse Voltage	Vrsm	75	150	275	500	725	900	1100	1300	1500	1700]
RMS Reverse Voltage	VR(RMS)	35	70	140	280	420	560	700	840	980	1120	
Forward Conduction												

Characteristics	Symbol	SBR25 Series	Unit
Maximum Average Forward Rectified Current @Tc = 60°C	lo	25	
Non-Repetitive Peak Forward Surge Current (No Voltage Reapplied t=8.3ms at 60Hz) (No Voltage Reapplied t=10ms at 50Hz) (100% VRRM Reapplied t=8.3ms at 60Hz) (100% VRRM Reapplied t=10ms at 50Hz)	Ігѕм	375 360 314 300	A
I ² t Rating for fusing (No Voltage Reapplied t=8.3ms at 60Hz) (No Voltage Reapplied t=10ms at 50Hz) (100% VRRM Reapplied t=8.3ms at 60Hz) (100% VRRM Reapplied t=10ms at 50Hz)	I ² t	580 635 410 450	A ² S

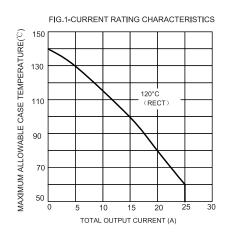
www.element14.com www.farnell.com www.newark.com

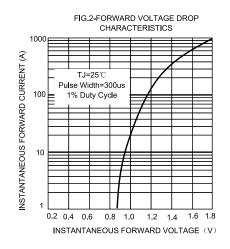


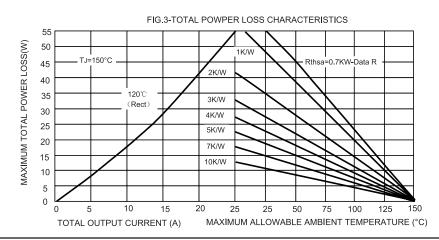


Characteristics	Symbol	SBR25 Series	Unit	
Maximum Forward Voltage drop per element at 12.5A/17.5A Peak	VF	1.1	V	
Peak Reverse Current (per leg) @Tj=25°C At Rated DC Blocking Voltage @Tj=125°C	lr	10 5	μA mA	
RMS Isolation Voltage from Case to Lead	Viso	2,500	V	
Thermal Characteristics				
Operating Temperature Range	TJ	-55 to +150	°C	
Storage Temperature Range	Tstg	-33 (0 +130		
Thermal Resistance Junction to Case at DC Operation per Bridge	Rejc	1.42	k/W	
Thermal Resistance Case to Heatsink Mounting Surface, Smooth, Flat and Greased	Recs	0.2] K/ VV	

Rating and Characteristic Curves





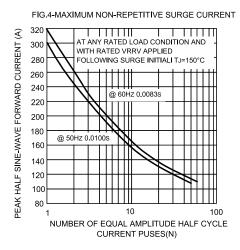


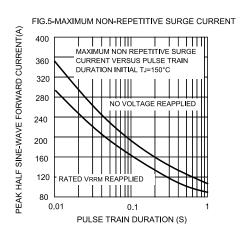
www.element14.com www.farnell.com www.newark.com



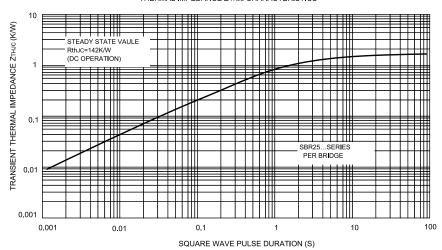
Page <2> 28/04/17 V1.0



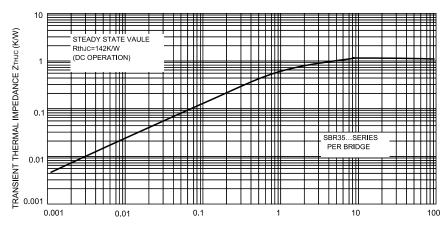




THERMAL IMPEDANCE ZTHUC CHARACTERISTICS



THERMAL IMPEDANCE ZTHJC CHARACTERISTICS



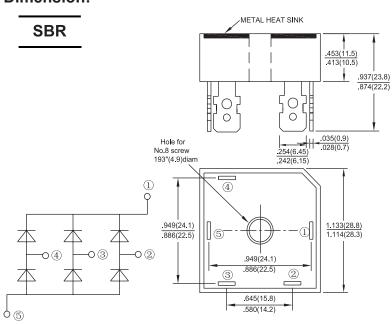
SQUARE WAVE PULSE DURATION (S)







Dimension:



Dimensions: Inches (Millimetres)

Part Number Table

Description	Part Number
Three Phase Bridge 25A 50V SBR Package	SBR2500
Three Phase Bridge 25A 100V SBR Package	SBR2501
Three Phase Bridge 25A 200V SBR Package	SBR2502
Three Phase Bridge 25A 400V SBR Package	SBR2504
Three Phase Bridge 25A 600V SBR Package	SBR2506
Three Phase Bridge 25A 800V SBR Package	SBR2508
Three Phase Bridge 25A 1000V SBR Package	SBR2510
Three Phase Bridge 25A 1200V SBR Package	SBR2512
Three Phase Bridge 25A 1400V SBR Package	SBR2514
Three Phase Bridge 25A 1600V SBR Package	SBR2516

Important Notice: This data sheet and its contents (the "Information") belong to the members of the Premier Farnell group of companies (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. Multicomp is the registered trademark of the Group. © Premier Farnell Limited 2016.

www.element14.com www.farnell.com www.newark.com

