

# BR25005 THRU BR2510

Single Phase 25 AMPS.Silicon Bridge Rectifiers

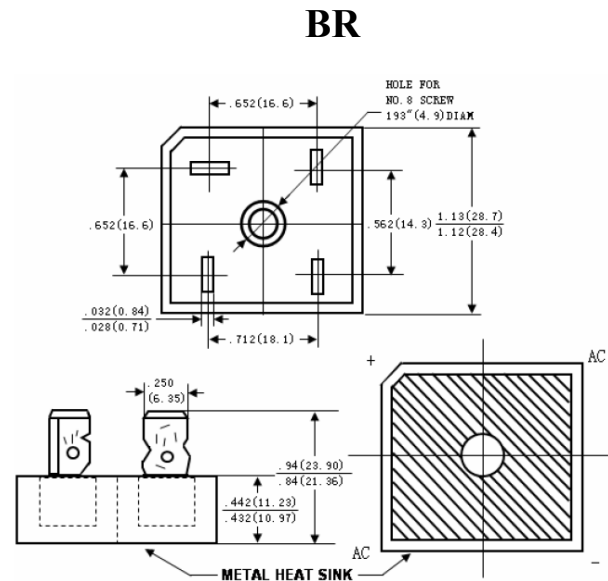
Voltage Range 50 to 1000 Volts Current 25 Amperes

## FEATURES

- ◆ Ideal for printed circuit board
- ◆ Reliable low cost construction technique results in inexpensive product
- ◆ High temperature soldering guaranteed:  
260°C / 10 seconds / 0.375" ( 9.5mm )  
lead length at 5 lbs., ( 2.3 kg ) tension
- ◆ UL Recognized File number: E347215

## MECHANICAL DATA

- ◆ Case: Molded plastic
- ◆ Lead: solder plated
- ◆ Polarity: As marked



## 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%

Type Number		BR 25005	BR 2501	BR 2502	BR 2504	BR 2506	BR 2508	BR 2510	UNITS
Maximum Repetitive Peak Reverse Voltage	$V_{RRM}$	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current @T <sub>c</sub> = 55°C	$I_{(AV)}$	25							A
Peak Forward Surge Current, 8.3ms Single Half Sine-wave Superimposed on Rated Load (JEDEC method )	$I_{FSM}$	400							A
Maximum Instantaneous Forward Voltage @12.5A	$V_F$	1.1							V
Maximum DC Reverse Current at Rated DC Blocking voltage per Element	$I_R$	5.0							μA
Typical Thermal Resistance (Note1)	$R_{\theta JC}$	1.5							°C/W
Operating Temperature Range	$T_J$	-55 to +125							°C
Storage Temperature Range	$T_{STG}$	-55 to +150							°C

Note: 1. Thermal Resistance from junction to case with units mounted on a 5" x 6" x 4.9" (12.8cm.x 15.2cm.x 12.4cm.) Al.-Finned Plate

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## RATING AND CHARACTERISTIC CURVES BR25005 THRU BR2510

FIG.1- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT PER BRIDGE ELEMENT

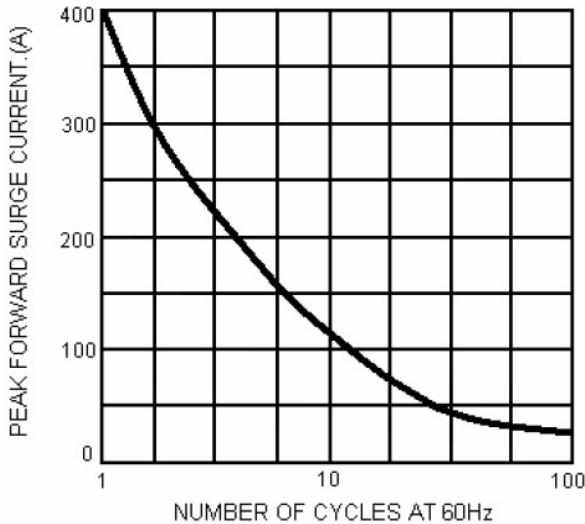


FIG.2-MAXIMUM FORWARD CURRENT DERATING CURVE

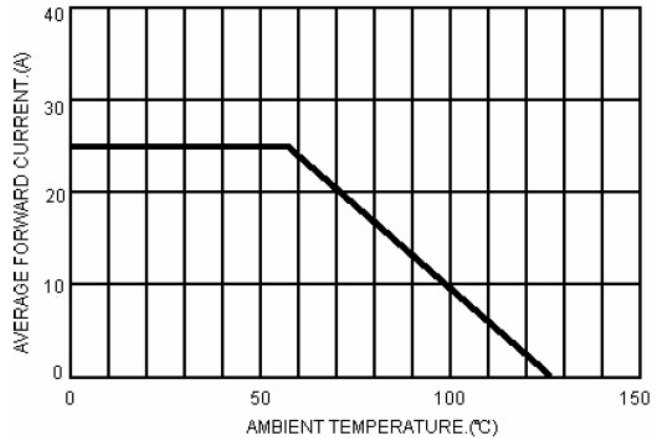


FIG.3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

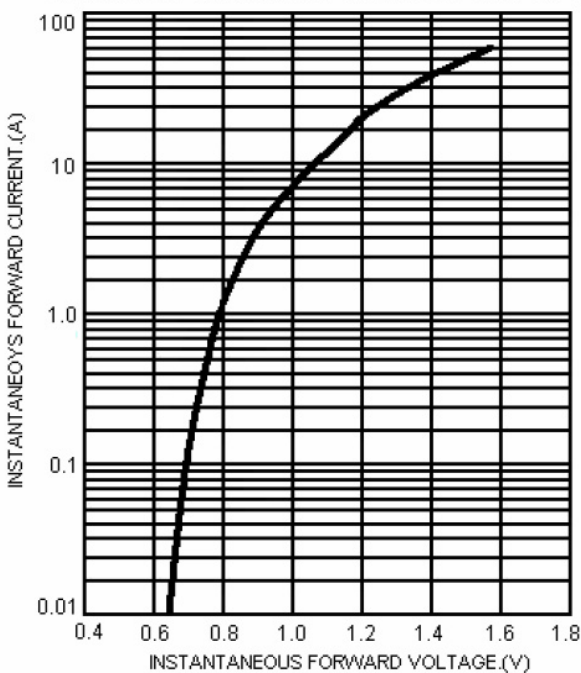
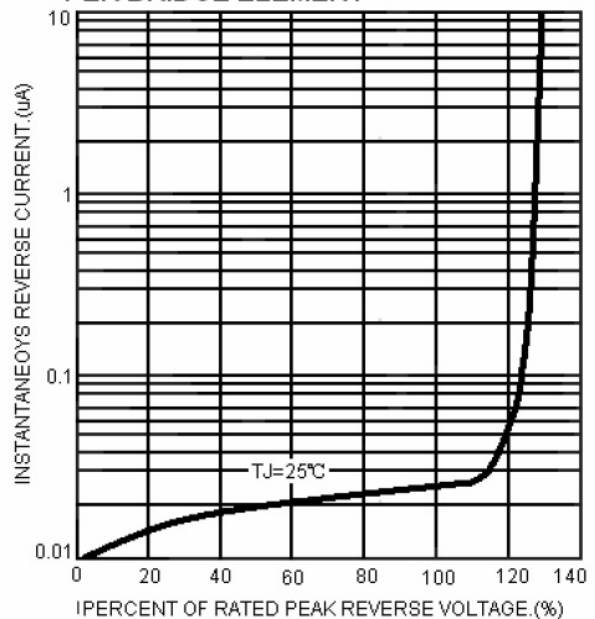


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT



Note: Specification are subject to change without notice. For more detail and update, please visit our website.