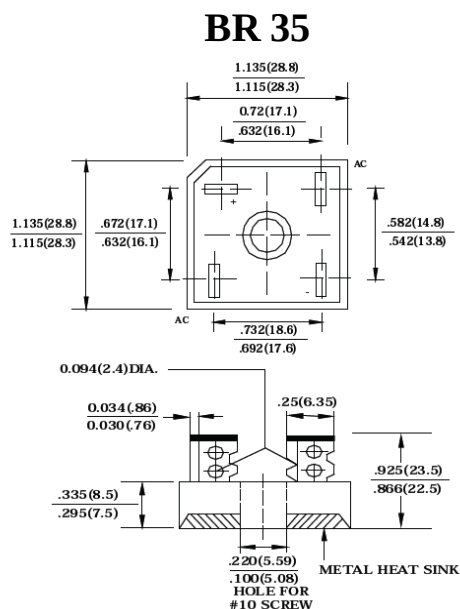


BR25005 THRU BR2510**SINGLE-PHASE BRIDGE RECTIFIER****VOLTAGE RANGE 50 to 1000 Volts CURRENT 25.0 Ampere****FEATURES**

- ◆ High forward surge current capability.
- ◆ Low thermal resistance.
- ◆ High isolation voltage from case to lugs.
- ◆ High temperature soldering guaranteed:
260°C/10 second, at 5 lbs. (2.3kg) tension.

Mechanical Data

- ◆ Case : Molded plastic with Heatsink internally moun
in the bridge encapsulation.
- ◆ Terminal: Plated 0.25" (6.35mm) lug.
- ◆ Polarity: Polarity symbols marked on case.
- ◆ Mounting: Thru hole for #10 screw, 20 in,- lbs. Torque Max.
- ◆ Weight:1.02 ounce, 29gram.

**Dimensions in inches and (millimeters)****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%**

PARAMETER	SYMBOL	BR25005	BR2501	BR2502	BR2504	BR2506	BR2508	BR2510	UNIT
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Current, at $T_C=55^{\circ}C$ (Note1, 2)	$I_{(AV)}$	25							Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	300							Amps
Rating for Fusing($t < 8.3ms$)	I^2T	373							A^2S
Maximum Instantaneous Forward Voltage at 12.5A	V_F	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage	$T_A = 25^{\circ}C$	I_R 5.0							μA mps
	$T_A = 150^{\circ}C$	0.5							mAmps
Isolation Voltage from case to lug	V_{ISO}	2500							V_{AC}
Typical Thermal Resistance (Note 1, 2)	$R_{\theta JC}$	2.0							$^{\circ}C/W$
Operating Temperature Range	T_J	-65 to +150							$^{\circ}C$
Storage Temperature Range	T_{stg}	-65 to +150							$^{\circ}C$

Note: 1. Unit mounted on 5" x 4" x 3" thick (12.8mm x 10.2mm x 7.3mm) Al. plate.

2. Bolt down on heat-sink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency with #10 screw.

BR25005 THRU BR2510

SINGLE-PHASE BRIDGE RECTIFIER

VOLTAGE RANGE 50 to 1000 Volts CURRENT 25.0 Ampere

RATING AND CHARACTERISTIC CURVES BR25005 THRU BR2510

FIG.1-DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

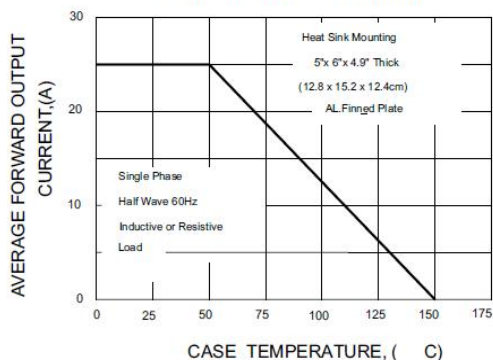


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT PER ELEMENT

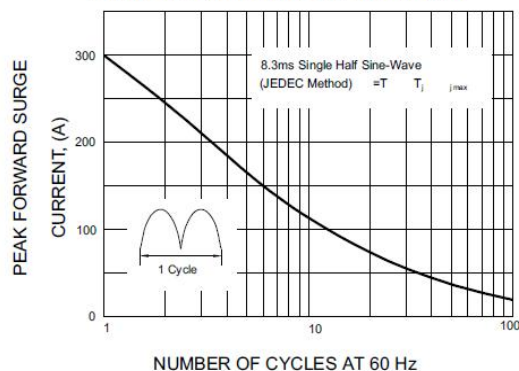


FIG.3-TYPICAL FORWARD CHARACTERISTICS
PER BRIDGE ELEMENT

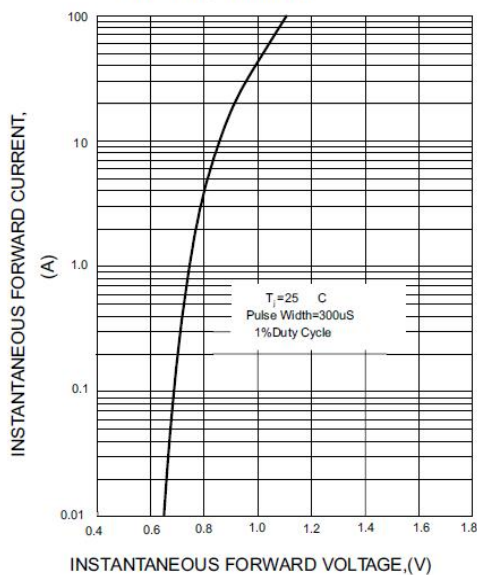


FIG.4-TYPICAL REVERSE CHARACTERISTICS
PER BRIDGE ELEMENT

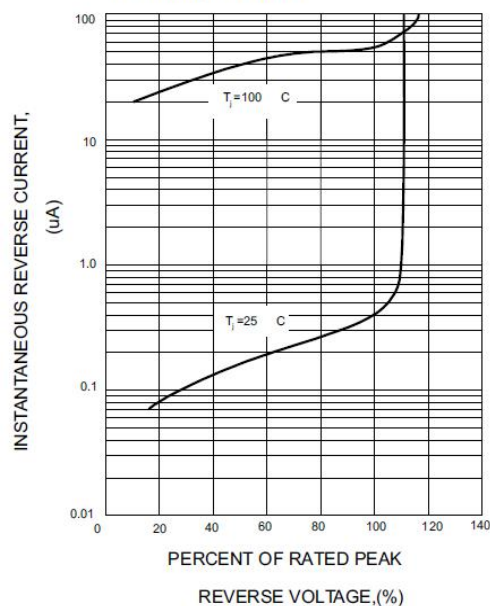


FIG.5-TYPICAL JUNCTION CAPACITANCE
PER BRIDGE ELEMENT

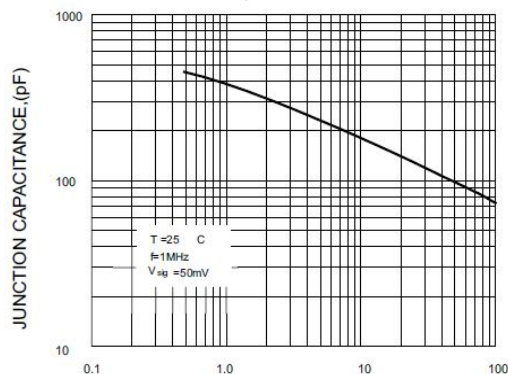
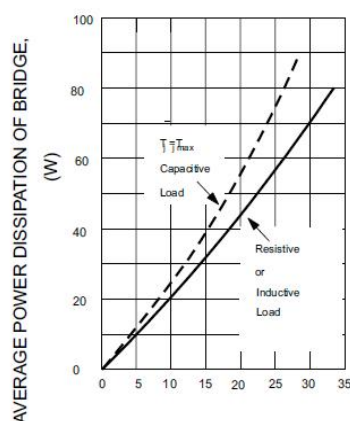


FIG.6-MAXIMUM POWER DISSIPATION



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