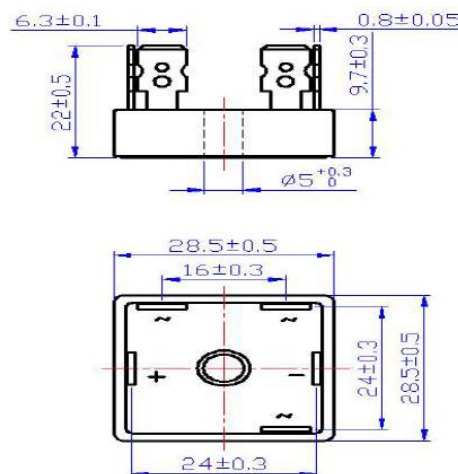


**Kingtronics**®**SKBPC3508 THRU  
SKBPC3516****THREE-PHASE BRIDGE RECTIFIER**  
**VOLTAGE RANGE 800 to 1600 Volts    CURRENT 35 Ampere****FEATURES**

Integrally molding heatsinks provide very low thermal resistance for maximum heat dissipation  
Surge overload rating to 400 amperes  
High temperature soldering guaranteed:  
260°C/10 second, at 5 lbs. (2.3kg) tension.

**MECHANICAL DATA**

Case: Epoxy, molded plastic with heatsink integrally mounted in the bridge encapsulation.  
Mounting Position: Bolt down on heatsink with silicone thermal compound between bridge and mounting surface for maximum heat transfer efficiency  
Mounting Torque: 20 in. lbs max.  
Weight:0.706 ounce, 20 grams

**SKBPC****MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS** Dimensions in inches and (millimeters)

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

	SYMBOLS	SKBPC3508	SKBPC3512	SKBPC3516	UNIT
Peak Repetitive Reverse Voltage	$V_{RRM}$	800	1200	1600	Volts
Working Peak Reverse Voltage	$I_{RWM}$	800	1200	1600	Volts
Maximum DC Blocking Voltage	$V_{DC}$	800	1200	1600	Volts
Maximum Average Forward Rectified Output Current, at $T_C=55^\circ\text{C}$ (Note 2)	$I_{(AV)}$	35			Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load(JEDEC Method)	$I_{FSM}$	400			Amps
Rating for Fusing ( $t<8.3\text{ms}$ )	$I^2T$	664			$\text{A}^2\text{S}$
Maximum Instantaneous Forward Voltage drop per bridge element at 17.5A	$V_F$	1.2			Volts
Maximum DC Reverse Current at rated DC blocking voltage per element $T_A=25^\circ\text{C}$	$I_R$	5.0			uAmps
Isolation Voltage from case to leads	$V_{iso}$	2500			VAC
Typical Thermal Resistance per Element	$R_{\theta JC}$	2.2			$^\circ\text{C}/\text{W}$
Operating Temperature Range	$T_J$	-55 to + 150			$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	-55 to + 150			$^\circ\text{C}$

**NOTES:**

- 1.Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
- 2.Unit mounted on 11.8" x 11.8" x 0.6" thick (300x300x15mm) Copper plate

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# SKBPC3508 THRU SKBPC3516

FIG.1-DERATING CURVE FOR  
OUTPUT RECTIFIED CURRENT

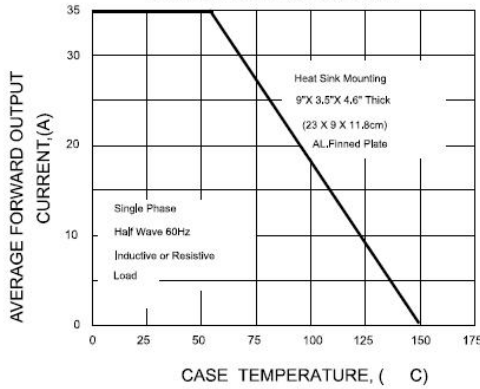


FIG.2-MAXIMUM NON-REPETITIVE PEAK  
FORWARD SURGE CURRENT PER ELEMENT

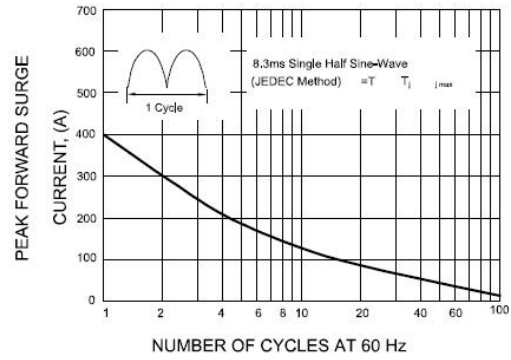


FIG.3-TYPICAL FORWARD CHARACTERISTICS  
PER BRIDGE ELEMENT

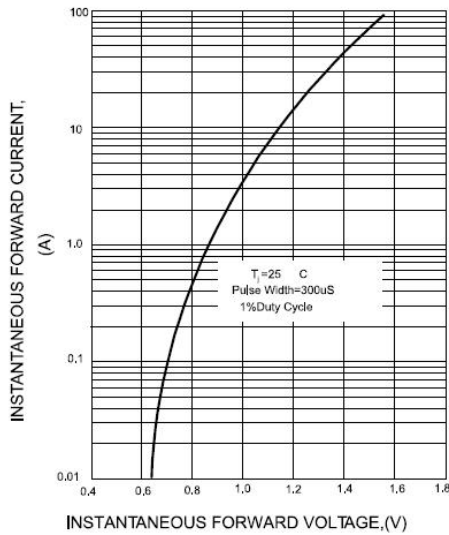


FIG.4-TYPICAL REVERSE CHARACTERISTICS  
PER BRIDGE ELEMENT

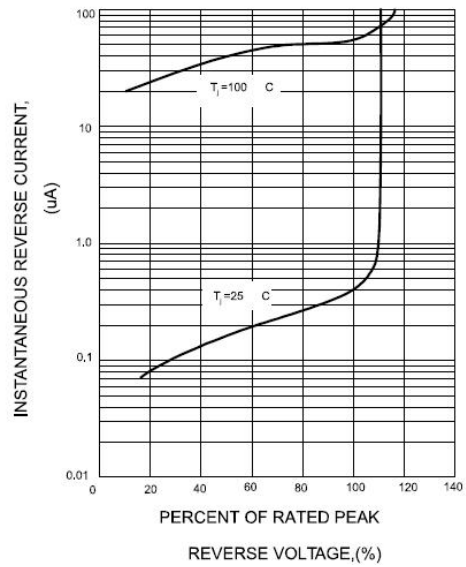


FIG.5-TYPICAL JUNCTION CAPACITANCE  
PER BRIDGE ELEMENT

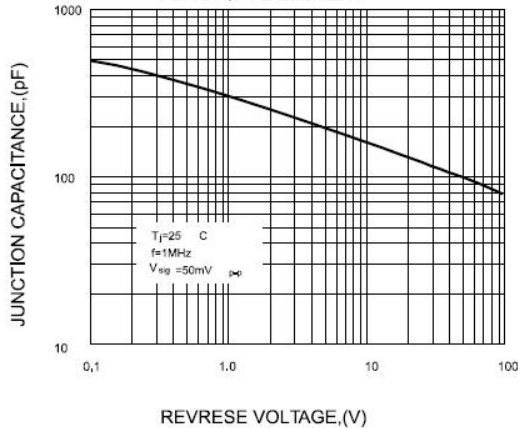
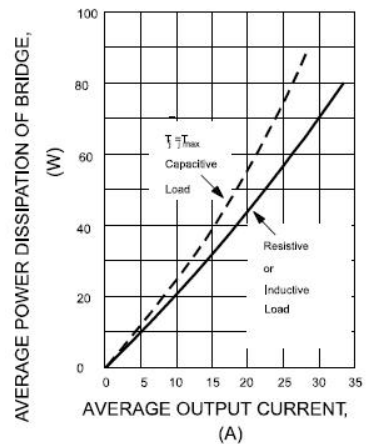


FIG.6-MAXIMUM POWER DISSIPATION



Note: Specifications are subject to change without notice.

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