

Kingtronics®**KBPC35005W THRU
KBPC3510W****SINGLE-PHASE BRIDGE RECTIFIER****VOLTAGE RANGE 50 to 1000 Volts CURRENT 35.0 Ampere****FEATURES**

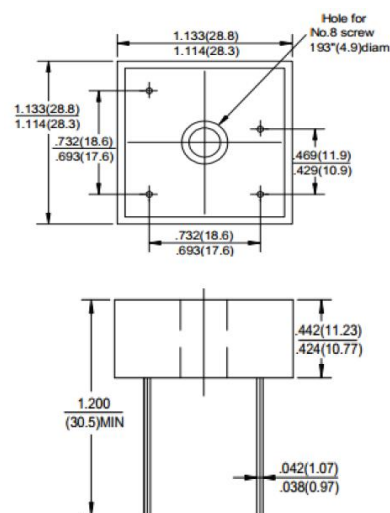
High forward surge current capability.
 Low thermal resistance.
 High isolation voltage from case to lugs.
 High temperature soldering guaranteed:
 260°C/10 second, at 5 lbs. (2.3kg) tension.

MECHANICAL DATA

Case: Metal case.
 Terminal: Plated 0.04" (1.02mm) lug.
 Polarity: Polarity symbols marked on case.
 Mounting: Thru hole for #10 screw, 20 in., - lbs. Torque Max.
 Weight: 0.93 ounce, 26.4gram.

**MAXIMUM RATINGS AND ELECTRICAL
CHARACTERISTICS**

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%

KBPC-W**Dimensions in inches and (millimeters)**

PARAMETER	SYMBOL	KBPC 35005W	KBPC 3501W	KBPC 3502W	KBPC 3504W	KBPC 3506W	KBPC 3508W	KBPC 3510W	UNIT
Maximum Repetitive 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 Output Current at $T_c=50^\circ\text{C}$ (Note 1, 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							A^2s
Maximum Instantaneous Forward Voltage at 17.5A	V_F	1.1							Volts
Maximum Reverse Current at Rated DC Blocking Voltage	$T_A=25^\circ\text{C}$	10							μAmps
	$T_A=150^\circ\text{C}$	1.0							mAmps
Isolation Voltage from case to lug	V_{ISO}	2500							V_{AC}
Typical Thermal Resistance (Note 1,2)	$R_{\theta JL}$	2.0							$^\circ\text{C}/\text{W}$
Operating Temperature Range	T_J	-65 to +150							$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-65 to +150							$^\circ\text{C}$

1- Unit mounted on 5"×4"×3" thick (12.8 mm×10.2 mm×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.

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RATINGS AND CHARACTERISTIC CURVES

FIG.1-DERATING CURVE FOR

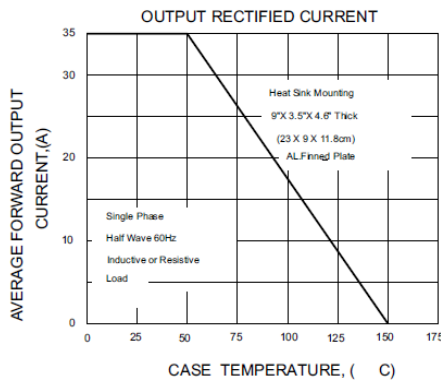


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

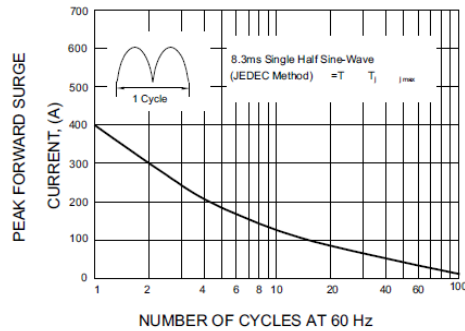


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

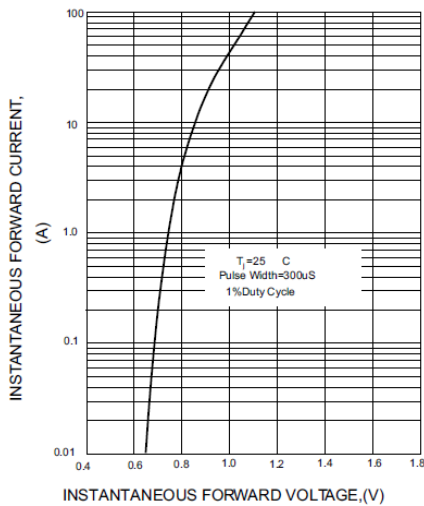


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

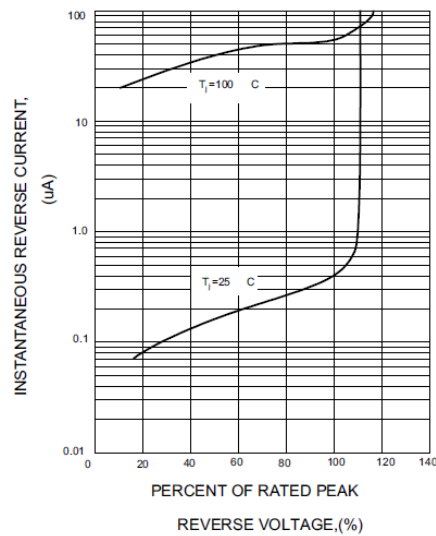


FIG.5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

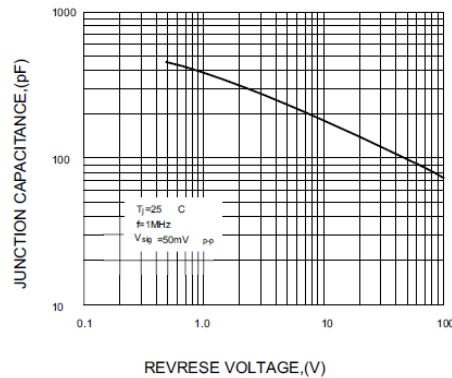
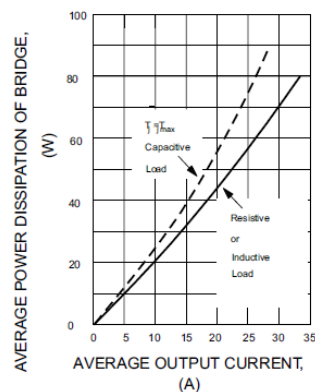


FIG.6-MAXIMUM POWER DISSIPATION



Note: Specifications are subject to change without notice.

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