WEJ®

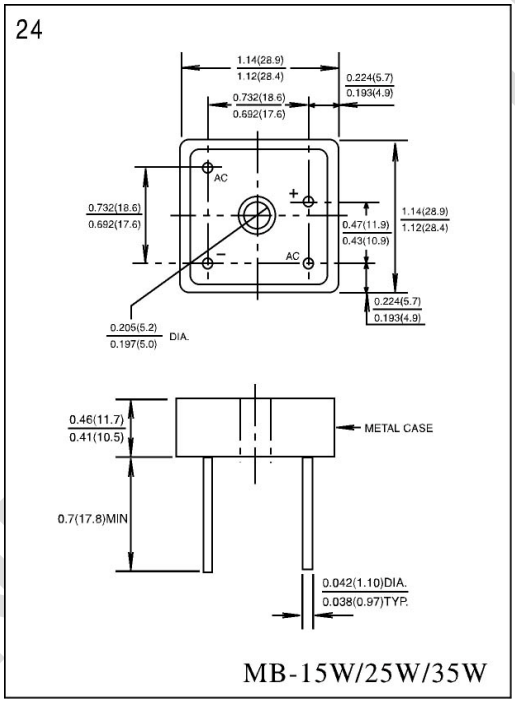
RoHS

KPC35005W-3510W

SINGLE-PHASE BRIDGE RECTIFIER

FEATURES

- Low cost
- This series is UL recognized under component index, file number E127707
- High forward surge current capability
- Low thermal resistance.
- High isolation voltage from case to leads.
- High temperature soldering guaranteed: 260℃/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℃ ambient temperature unless otherwise specified
- Single phase, half wave, 60Hz, resistive or inductive load.
- For capacitive load derate current by 20%

	SYMBOLS	KBPC 35005W MB3505W	KBPC 3501W MB351W	KBPC 3502W MB352W	KBPC 3504W MB354W	KBPC 3506W MB356W	KBPC 3508W MB358W	KBPC 3510W MB3510W	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℃ (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<8.3ms)	I^2t	664							A^2s
Maximum Instantaneous Forward Voltage Drop per bridge element at 17.5A	V_F	1.1							Volts
Maximum DC Reverse Current at rated DC blocking voltage per element T_A = 25℃	I_R	10							μA
Maximum DC Reverse Current at rated DC blocking voltage per element T_A = 100℃	I_R	1.0							mA
Isolation Voltage from case to leads.	V_{ISO}	2500							V_{AC}
Typical Thermal Resistance	$R_{\theta JC}$	2.0							℃/W
Operating Temperature Range	T_J	(-65 to +150)							℃
Storage Temperature Range	T_{STG}	(-65 to +150)							℃

1. Unit mounted on 9" X 3.5" X 4.6" (23cm X 9cm X 11.8cm)Al. finned Plate.
2. Bolt down on heat-sink with silicon thermal compound between bridge and mounting sutfae for maximum heat transfer efficiency with # 10 screw.

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FIG.1-DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

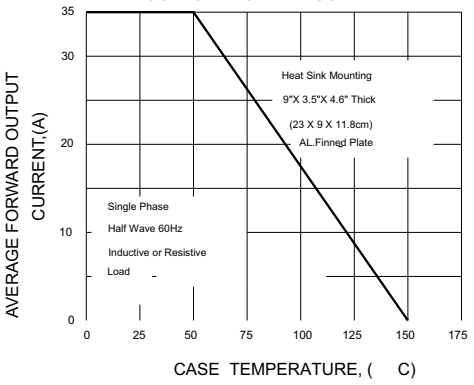


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT PER ELEMENT

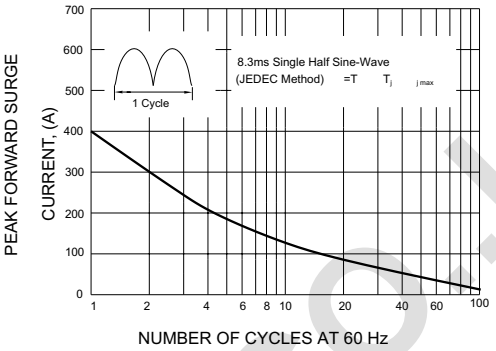


FIG.3-TYPICAL FORWARD CHARACTERISTICS
PER BRIDGE LEMENT

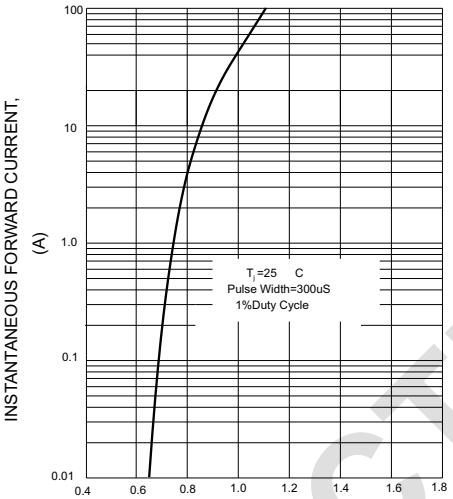


FIG.4-TYPICAL REVERSE CHARACTERISTICS
PER BRIDGE ELEMENT

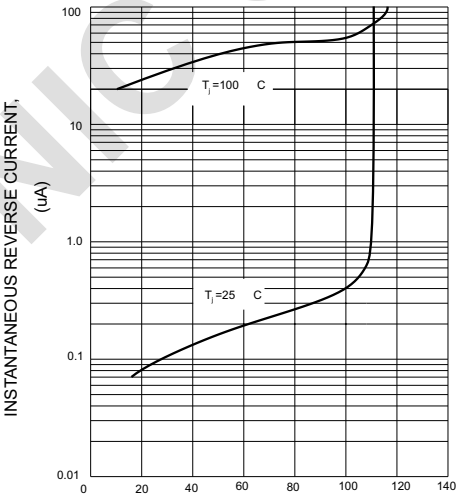


FIG.5-TYPICAL JUNCTION CAPACITANCE
PER BRIDGE ELEMENT

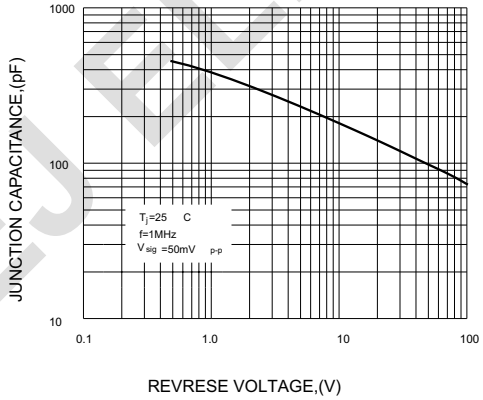
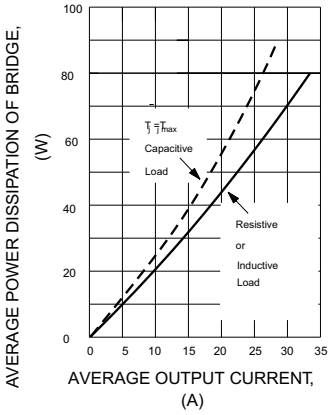


FIG.6-MAXIMUM POWER DISSIPATION



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