



DATA SHEET

SEMICONDUCTOR

KBPC35005 THRU KBPC3510

VOLTAGE RANGE 50 to 1000 Volts



CURRENT 35 Ampere

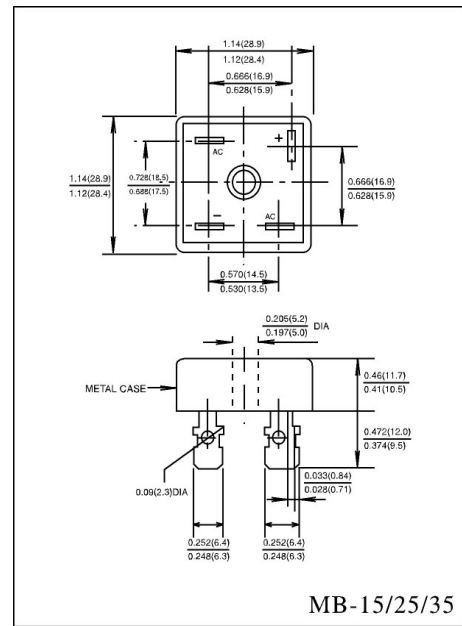
FEATURES

- Low cost
- This series is UL recognized under component index, file number E127707
- High forward surge current capability
- Integrally molded heatsink provide very low thermal resistance.
- High isolation voltage from case to lugs.
- High temperature soldering guaranteed: 260 /10 second, at 5 lbs. (2.3kg) tension.
- High temperature soldering : 260°C / 10 seconds at terminals
- Pb free product at available : 99% Sn above meet RoHS environment substance directive request

MECHANICAL DATA

- Case: Metal case
- Terminal: Plated 0.25" (6.35mm) lug.
- Polarity: Polarity symbols marked on case.
- Mounting: Thru hole for #10 screw, 20 in.- lbs. Torqute Max.
- Weight: 1.02 ounce, 29gram

MB-35 Unitinch(mm)



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%

PARAMETER	SYMBOLS	KBPC 35005	KBPC 3501	KBPC 3502	KBPC 3504	KBPC 3506	KBPC 3508	KBPC 3510	UNIT
Maximum Repetitive Peak Reverse Voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS Voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum Average Forward Rectified Output Current, at TC = 50 (Note 1, 2)	I(AV)	35							Amps
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method)	IFSM	400							Amps
Rating for Fusing (t<8.3ms)	I2t	664							A2s
Maximum Instantaneous Forward Voltage Drop per bridge element at 17.5A	VF	1.1							Volts
Maximum DC Reverse Current at rate DC blocking voltage per element	TA = 25	10							μ A
	TA = 100	1.0							mA
Isolation Voltage from case to lugs	VISO	2500							VAC
Typical Thermal Resistance (Note 1,2)	R JC	2.0							/W
Operating Temperature Range	TJ	(-65 to +150)							
Storage Temperature Range	TSTG	(-65 to +150)							

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

DEVICE CHARACTERISTICS

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FIG.1-DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

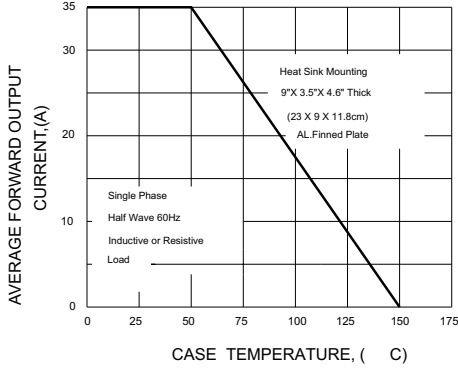


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT PER ELEMENT

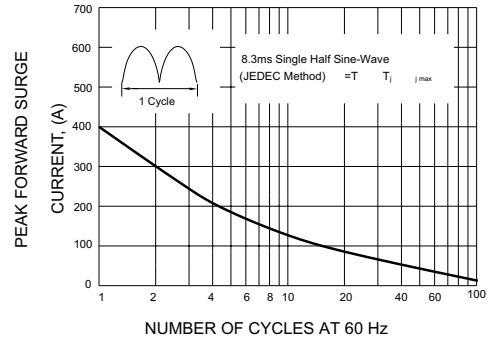


FIG.3-TYPICAL FORWARD CHARACTERISTICS
PER BRIDGE ELEMENT

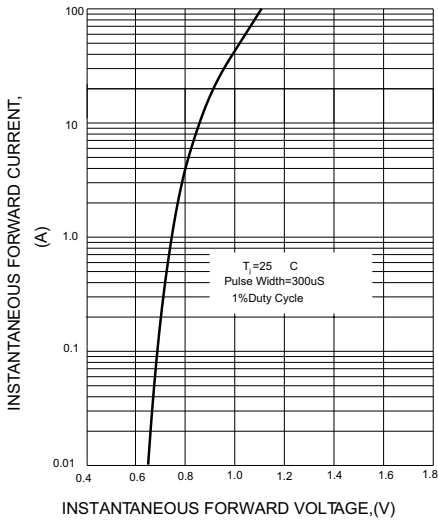


FIG.4-TYPICAL REVERSE CHARACTERISTICS
PER BRIDGE ELEMENT

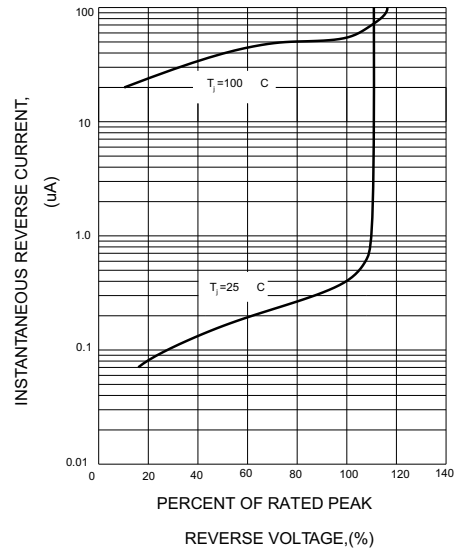


FIG.5-TYPICAL JUNCTION CAPACITANCE
PER BRIDGE ELEMENT

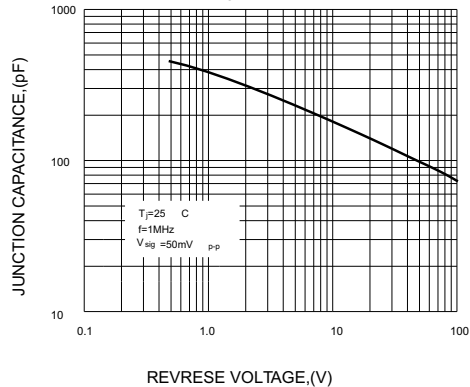


FIG.6-MAXIMUM POWER DISSIPATION

