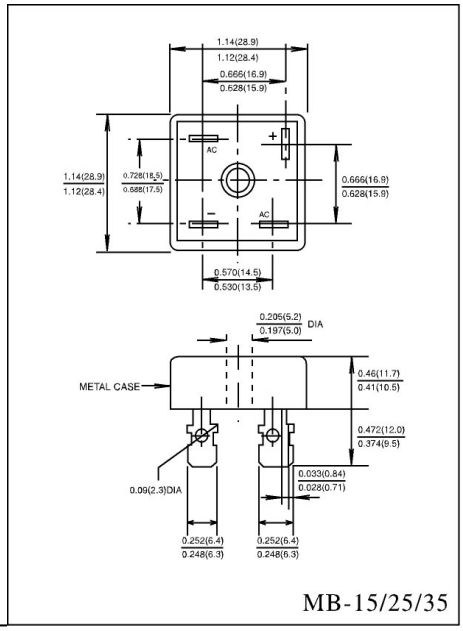
SEMICONDUCTOR

DATA SHEET

KBPC25005 THRU KBPC2510

VOLTAGE RANGE 50 to 1000 Volts
CURRENT 25 Ampere

MB-35 Unitinch(mm)



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 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: Matel 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, 29 grams

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%

PARAMETER		SYMBOLS	KBPC 25005	KBPC 2501	KBPC 2502	KBPC 2504	KBPC 2506	KBPC 2508	KBPC 2510	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)	25							Amps
Peak Forward Surge Current 8.3ms single half sine - wave superimposed on rated load (JEDEC method)		IFSM	300							Amps
Rating for Fusing (t<8.3ms)		I2t	373							A2s
per bridge element at 12.5A Maximum Instantaneous Forward Voltage Drop		VF	1.1							Volts
Maximum DC Reverse Current at rate DC blocking voltage per element	**TA = 25℃**	IR	10							μA
	TA =100℃		1.0							**mA**
Isolation Voltage from case to lugs		VISO	2500							VAC
Typical Thermal Resistance (Note 1,2)		RθJC	2.0							℃/W
Operating Temperature Range		TJ	(-65 to +150)							℃
Storage Temperature Range		TSTG	(-65 to +150)							

1. Unit mounted on 5"X6"X4.9"(12.8cm X 15.2cm X 12.4cm)A1.finned Plate.
2. Bolt down on heat-sink with silicon thermal compound between bridge and mounting sutfase for maximum heat Transfer efficiency with# 10 screw.

DEVICE CHARACTERISTICS

KBPC25005 THRU KBPC2510

FIG.1-DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

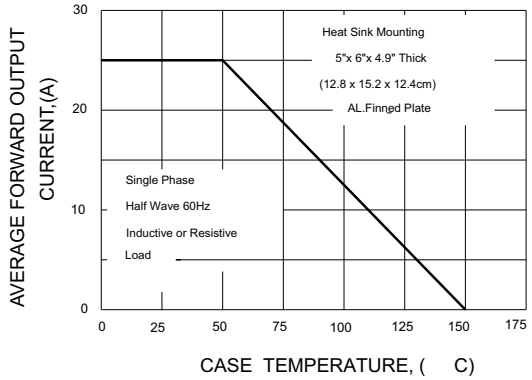


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT PER ELEMENT

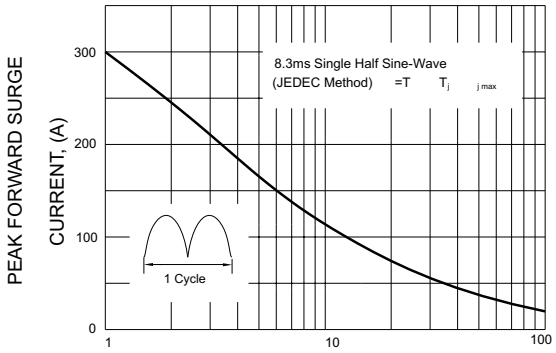


FIG.3-TYPICAL FORWARD CHARACTERISTICS
PER BRIDGE ELEMENT

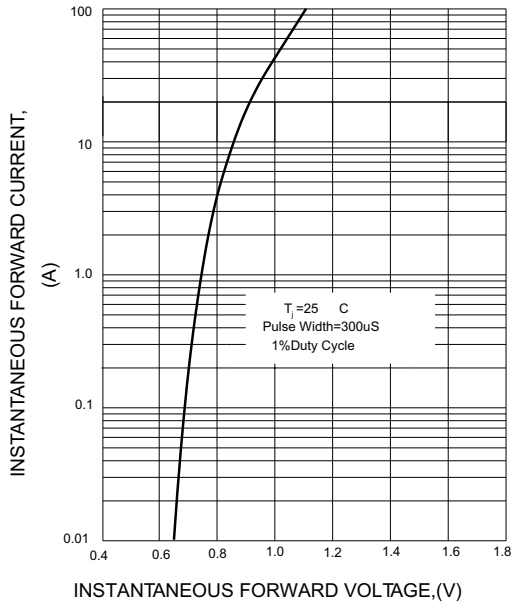


FIG.4-TYPICAL REVERSE CHARACTERISTICS
PER BRIDGE ELEMENT

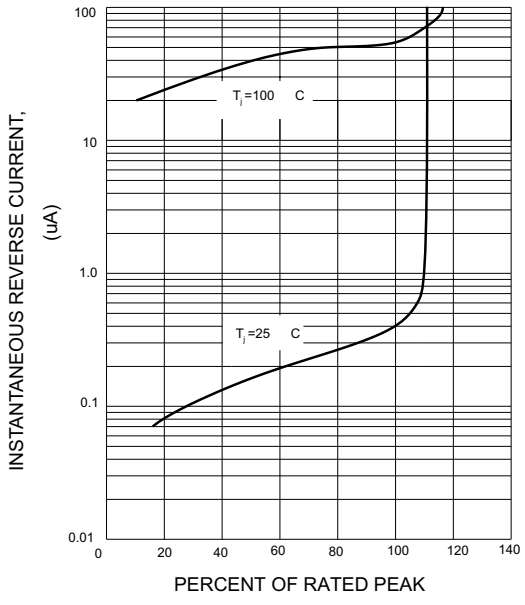


FIG.5-TYPICAL JUNCTION CAPACITANCE
PER BRIDGE ELEMENT

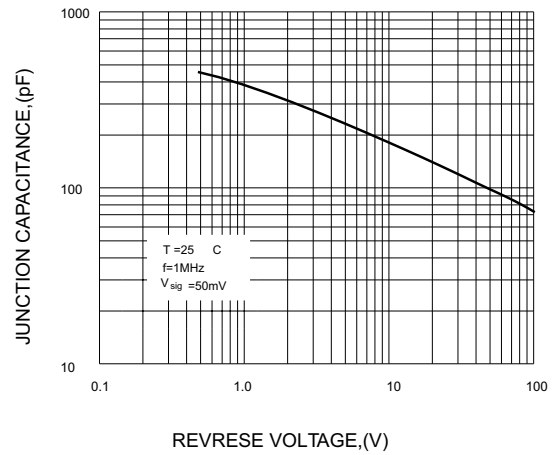


FIG.6-MAXIMUM POWER DISSIPATION

