Single-Phase Bridge Rectifier

Features

- Low cost
- This series is UL recognized under component index, file number E127707
- Chip is glass passivated with copper plate solding
- Ideal for printed circuit board
- High forward surge current capability
- High temperature soldering guaranteed:
  260℃/10 seconds, 0.375" (9.5mm) lead length at 5 lbs. (2.3kg) tension
- RoHS and REACH Compliance

Case Style KBL

Mechanical Data

Case:	Transfer molded plastic
Polarity	/
Terminals:	Lead solderable per MIL-STD-202E method 208C
Mounting position:	Any
Weight:	0.22 ounce, 6.21 gram

Maximum Ratings *(T Ambient=25ºC unless noted otherwise)*

Symbol	Description	KBL005	KBL01	KBL02	KBL04	KBL06	KBL08	KBL10	Unit	Conditions
VRRM	Max Recurrent Peak Reverse Voltage	50	100	200	400	600	800	1000	**V**	
VRMS	Max RMS Voltage	35	70	140	280	420	560	700	**V**	
VDC	Max DC Blocking Voltage	50	100	200	400	600	800	1000	**V**	
I(AV)	Max Average Forward Rectified Current	4.0 / 3.0							**A**	TC=50℃ TA=50℃ (Note2,3)
IFSM	Peak Forward Surge Current	200							**A**	JEDEC method
TJ,TSTG	Operating and Storage Temperature Range	-65 to +150, -65 to +150							℃	
I2t	Rating for Fusing	166							**A2s**	T<8.3mS

Electrical Characteristics *(T Ambient=25ºC unless noted otherwise)*

Symbol	Description	KBL401	KBL01	KBL02	KBL04	KBL06	KBL08	KBL10	Unit	Conditions
VF	Max Instantaneous Forward Voltage	1.0							**V**	Drop per Bridge element 4.0A
IR	Max DC Reverse Current at Rated DC Blocking Voltage	10							**μA**	TA=25℃
		1.0							**mA**	TA=100℃
RθJA	Typical Thermal Resistance	2.0							℃/W	Note 2
CJ	Typical Junction Capacitance	150 / 250 / 500							**pF**	Note 1

Note:

1. Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts.
2. Unit mounted on 3.0" x 3.0" x 0.11" thick (7.5x 7.5 x 0.3cm) Al. plate
3. P.C.Board mount with 5"x5" (12x12mm) copper pads 0.375" (9.5mm) lead length

KBL005 ~ KBL10 (KBL401~KBL407)

RATINGS AND CHARACTERISTIC CURVES KBL005 THRU KBL10

FIG.1—DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

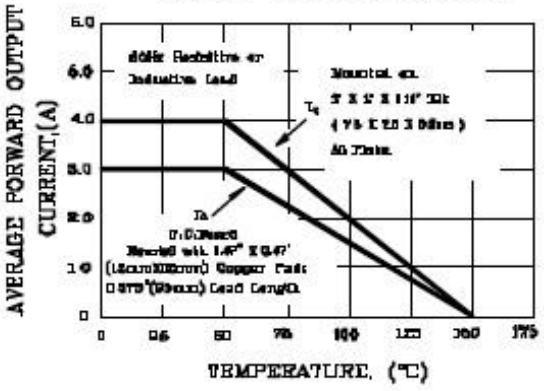


FIG.2—MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

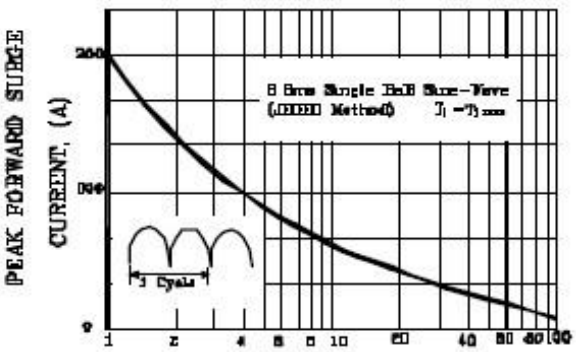


FIG.3—TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

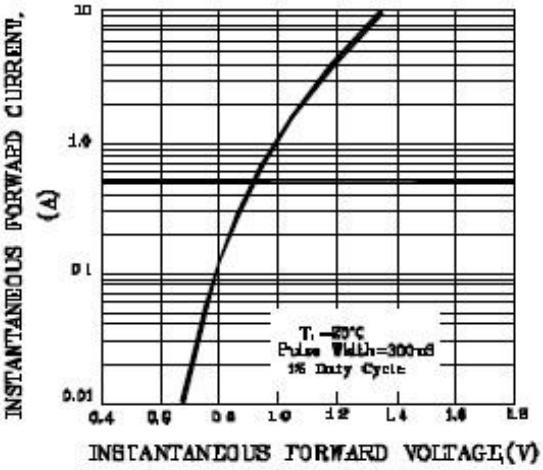


FIG.4—TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

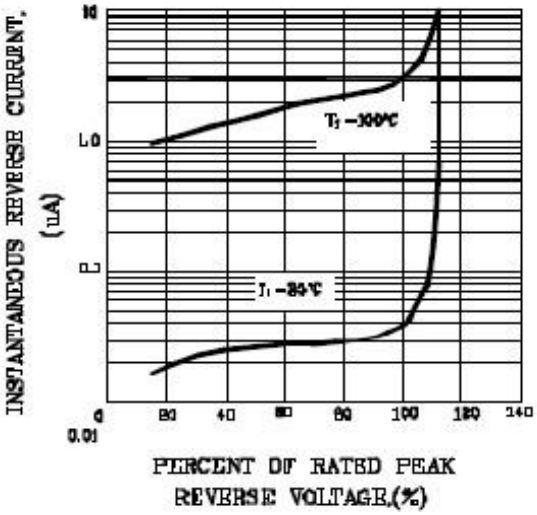
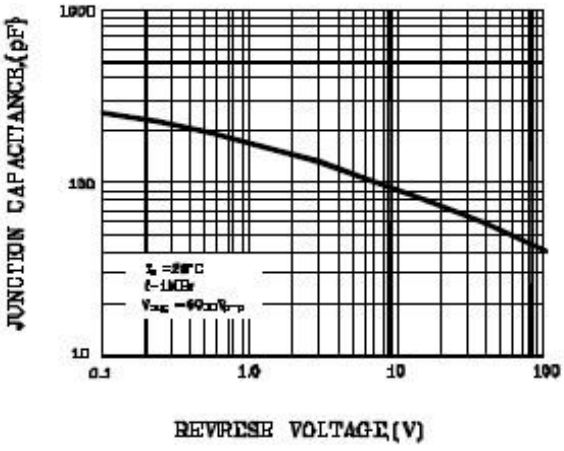


FIG.5—TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT



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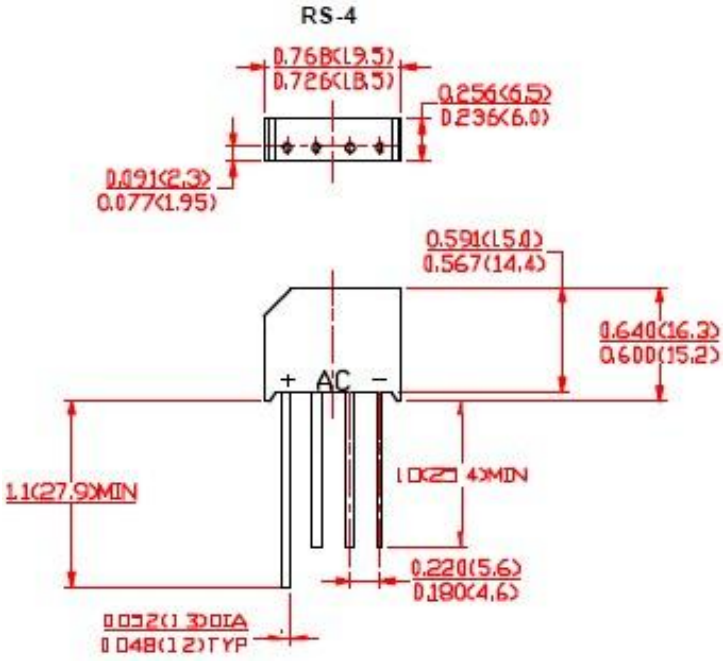
Dimensions in inches (mm)



Contact us:

US HEADQUARTERS

MEI SEMI INC.

2902 Corvin Drive, Santa Clara, CA95051, USA

Tel: 1-408-733-0808 Fax: 1-408-733-2828