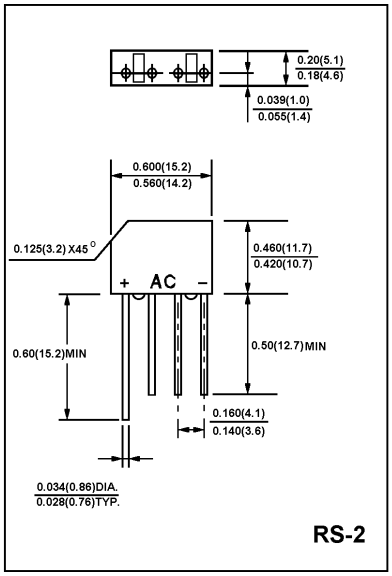
MOSPEC

KBP005/RS201 THRU KBP10/RS207

SINGLE-PHASE BRIDGE RECTIFIER
VOLTAGE RANGE 50 to 1000 Volts
CURRENT 2.0 Ampere



RS-2

FEATURES
- ＊Low cost
- ＊High forward surge current capability
- ＊Ideal for printed circuit board
- ＊High temperature soldering guaranteed: 260°c/10 second at 5 lbs. (2.3kg) tension

MECHANICAL DATA
- ＊Case: Transfer molded plastic
- ＊Epoxy: UL94V-O rate flame retardant
- ＊Terminals：Lead Solderable Per MIL-STD-202E method 208C
- ＊Polarity：As Marking on Body
- ＊Mounting Position: Any
- ＊Weight： 0.069 ounce, 1.95 gram

MAXIMUM RATINGS AND ELECTRICAL CHARATERISTICS

* Rating at 25℃ ambient temperature unless otherwise specified
* Single phase,half wave. 60Hz, resistive or inductive load.
* For capacitive load derate current by 20 %

Characteristic	Symbol	KBP005 RS201	KBP01 RS202	KBP02 RS203	KBP04 RS204	KBP06 RS205	KBP08 RS206	KBP10 RS207	Unit
Peak Repetitive Reverse Voltage Working Peak Reverse Voltage DC Blocking Voltage	V_{RRM} V_{RWM} V_R	50	100	200	400	600	800	1000	V
RMS Reverse Voltage	$V_{R(RMS)}$	35	70	140	280	420	560	700	V
Average Rectifier Forward Current (Note 1) @ T_A=50℃	$I_{O(AV)}$	2.0							A
Non-Repetitive Peak Surge Current 8.3 ms Single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	50							A
Forward Voltage (per element) (I_F =2.0 Amp)	V_{FM}	1.0							V
Peak Reverse Current (Rated DC Voltage, T_C = 25℃) (Rated DC Voltage, T_C = 100℃)	I_R	10 0.5							uA mA
Rating for Fusing(t<8.3 ms)	I^2t	10							A^2s
Typical Junction Capacitance per element (Note2)	C_J	20							pF
Typical Thermal Resistance (note 3)	$R_{\theta jA}$	28							k/W
Operating and Storage Temperature Range	T_J , T_{stg}	-65 to +150							℃

Note: 1 Lead maintained at ambient temperature at a distance of 9.5 mm from the case.
2. Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
3. Thermal resistance junction to ambient, mounted on PC board with 12 mm^2 copper pad.

KBP005/RS201 thru KBP10/RS207

FIG-1 FORWARD CURRENT DERATING CURVE

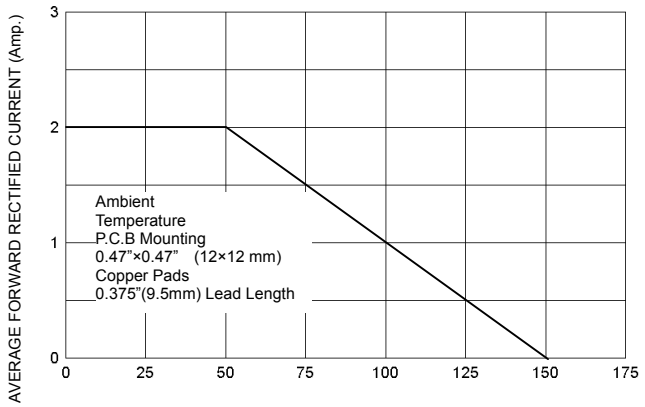


FIG-2 TYPICAL FORWARD CHARACTERISITICS

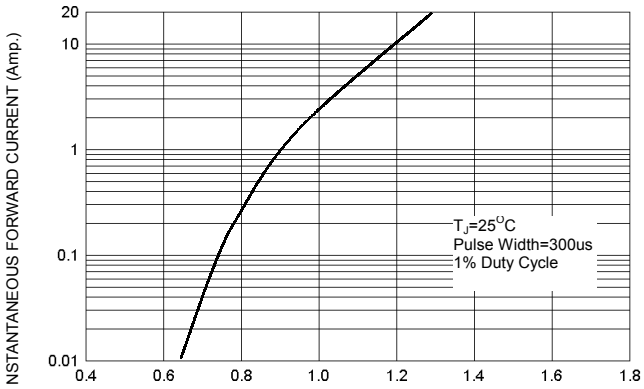


FIG-3 PEAK FORWARD SURGE CURRENT

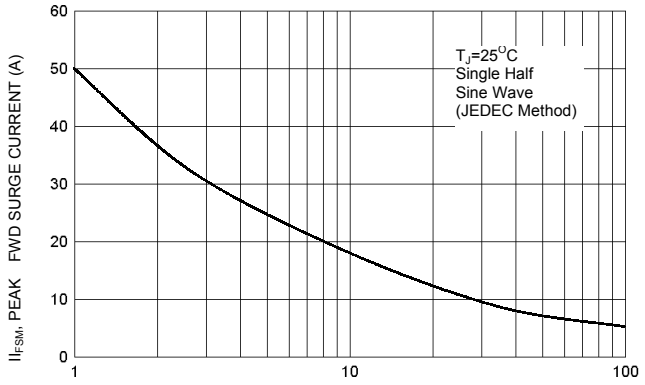


FIG-4 TYPICAL JUNCTION CAPACITANCE

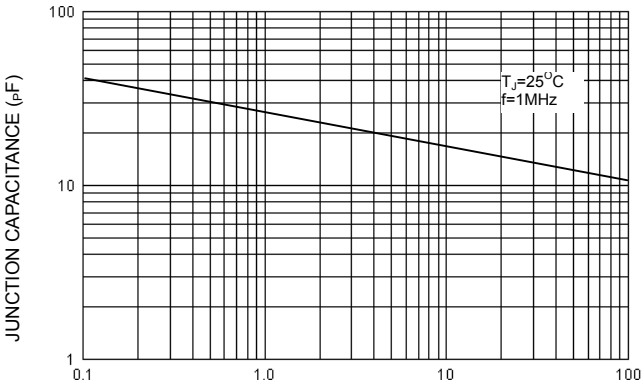


FIG-5 TYPICAL REVERSE CHARACTERISTICS