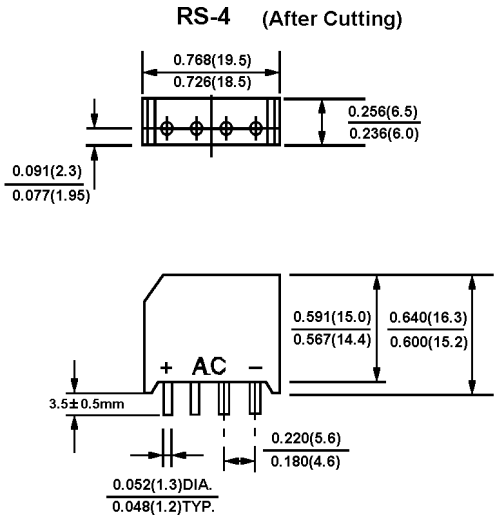
MOSPEC

KBL005M-T35 THRU KBL10M-T35

SINGLE-PHASE BRIDGE RECTIFIER
VOLTAGE RANGE 50 to 1000 Volts
CURRENT 4.0 Ampere



Dimensions in inches and(millimeters)

FEATURES

- ＊Glass Passivated chip junction
- ＊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
- ＊Marking:KBL005M~KBL10M

Plating pb free

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	KBL005M -T35	KBL01M -T35	KBL02M -T35	KBL04M -T35	KBL06M -T35	KBL08M -T35	KBL10M -T35	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 Forward Rectified Output Current , at	T_C=50℃(Note 2)	$I_{O(AV)}$	4.0							A
	T_A=50℃(Note 3)		3.0							
Non-Repetitive Peak Surge Current 8.3 ms Single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	200							A
Forward Voltage (per element) (I_F =2.0 Amp)		V_{FM}	1.0							V
Maximum DC reverse current at rated DC blocking voltage per element	T_A = 25℃	I_R	10							uA
	T_A = 100℃		1.0							mA
Rating for Fusing(t<8.3 ms)		I^2t	166							A^2s
Typical Junction Capacitance per element (Note1)		C_J	105							pF
Typical Thermal Resistance (note 3)		$R_{\theta jA}$	20							k/W
Operating and Storage Temperature Range		T_J , T_{stg}	-65 to +150							℃

Note: 1 Measured at 1.0 MHz and applied reverse voltage of 4.0V D.C.
2. Unit mounted on 3.0”×3.0”×0.11” thick (7.5×7.5×0.3 cm) AL, plate.
3. P.C. board mount with 0.5”×0.5”(12×12mm) copper pad. 0.375”(9.5 mm)lead length.

KBL005M-T35 thru KBL10M-T35

FIG-1 FORWARD CURRENT DERATING CURVE

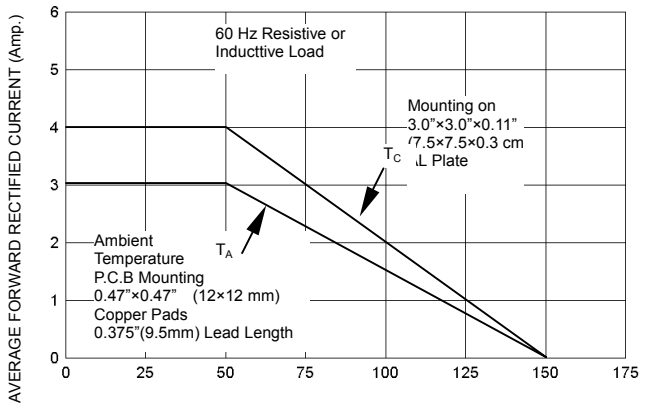


FIG-2 TYPICAL FORWARD CHARACTERISITICS

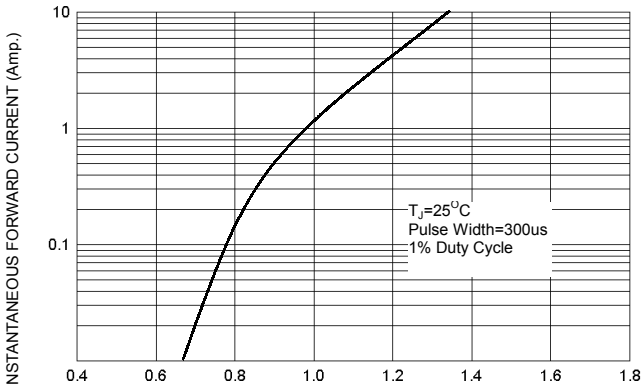


FIG-3 PEAK FORWARD SURGE CURRENT

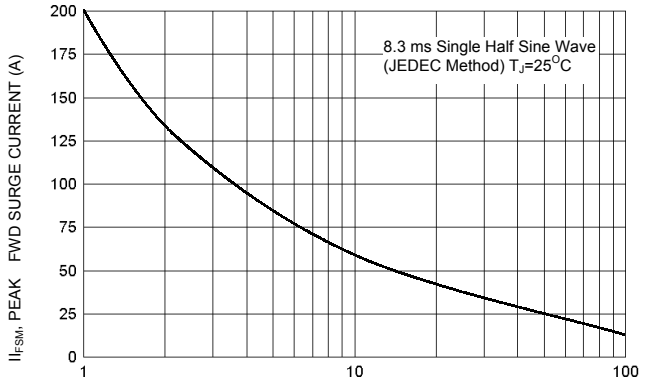


FIG-4 TYPICAL JUNCTION CAPACITANCE

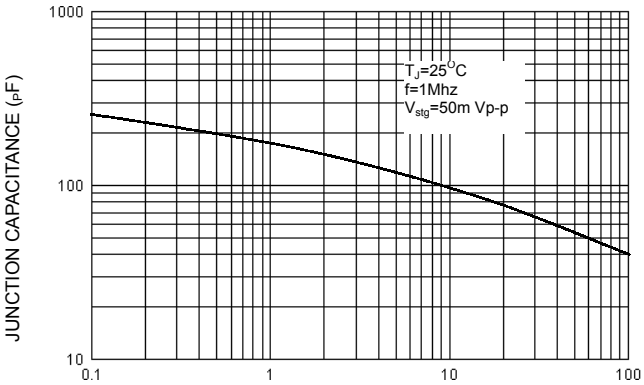


FIG-5 TYPICAL REVERSE CHARACTERISTICS