

# MSKSEMI 美森科

SEMICONDUCTOR



ESD



TVS



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MOV



GDT



PLED

## KBL6005-MS THRU KBL610-MS

Product specification

**VOLTAGE RANGE: 50 - 1000V**  
**CURRENT: 6.0 A**

**FEATURES**

- The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- Ideal for printed circuit boards
- Low reverse leakage
- High forward surge current capability
- High temperature soldering guaranteed:  
260 C/10 seconds,0.375”(9.5mm) lead length,  
5 lbs. (2.3kg) tension

**MECHANICAL DATA**

- **Case:** Molded plastic body
- **Terminals:** Plated leads solderable per MIL-STD-750, Method 2026
- **Polarity:** Polarity symbols marked on case
- **Mounting Position:** Any
- **Weight:**0.22 ounce, 6.21 grams

**REFERENCE NEWS**



**Marking**

KBL6005-MS	KBL601-MS	KBL602-MS	KBL604-MS
KBL606-MS	KBL608-MS	KBL610-MS	

## 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 current derate by 20%.

Characteristic	SYMBOLS	KBL6005-MS	KBL601-MS	KBL602-MS	KBL604-MS	KBL606-MS	KBL608-MS	KBL610-MS	UNITS
Maximum repetitive peak reverse voltage	$V_{RRM}$	50	100	200	400	600	800	1000	VOLTS
Maximum RMS voltage	$V_{RMS}$	35	70	140	280	420	560	700	VOLTS
Maximum DC blocking voltage	$V_{DC}$	50	100	200	400	600	800	1000	VOLTS
Maximum average forward output rectified current at Tc=50° C(Note 2) TA=50° C(Note 3)	$I_{AV}$	6.0 3.8							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	$I_{FSM}$	125							Amps
Maximum instantaneous forward voltage drop per bridge element at 6.0A	$V_F$	1.1							Volts
Maximum DC reverse current at rated DC blocking voltage TA=25°C TA=100°C	$I_R$	10							μA
		1.0							mA
Typical Junction Capacitance (Note 1)	$C_J$	105							pF
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	20							°C/W
Operating junction temperature range	$T_J$	-55 to +150							°C
storage temperature range	$T_{STG}$	-55 to +150							°C

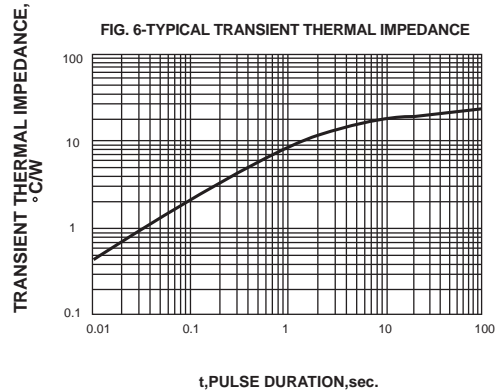
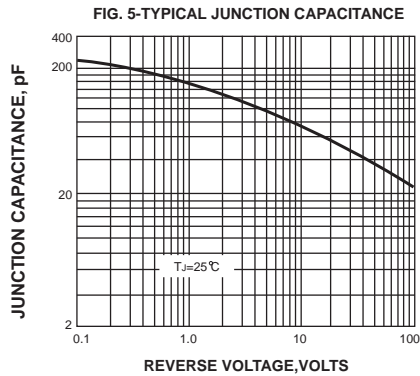
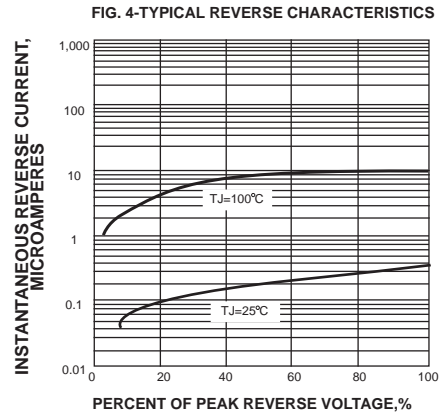
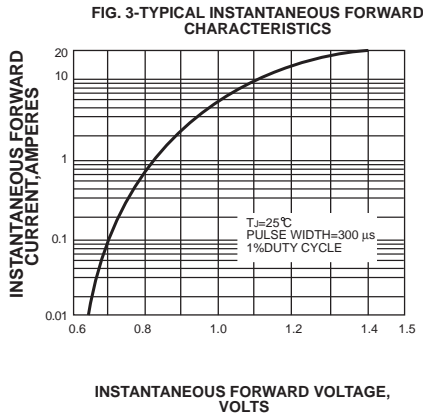
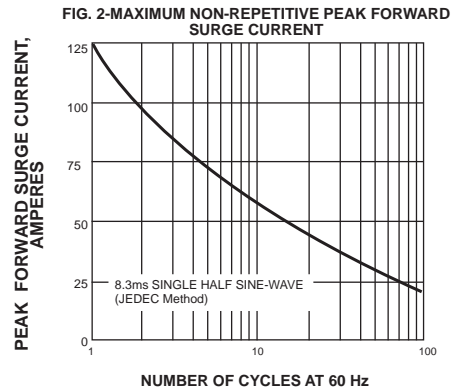
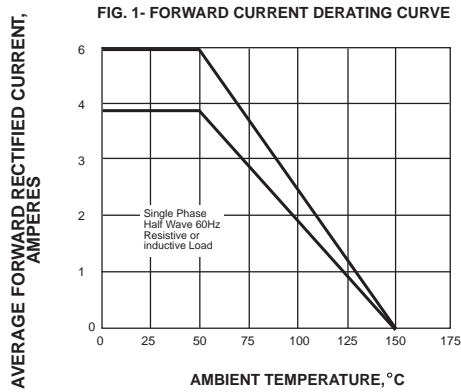
### NOTES:

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 (7.5x7.5x0.3cm) Al. plate.

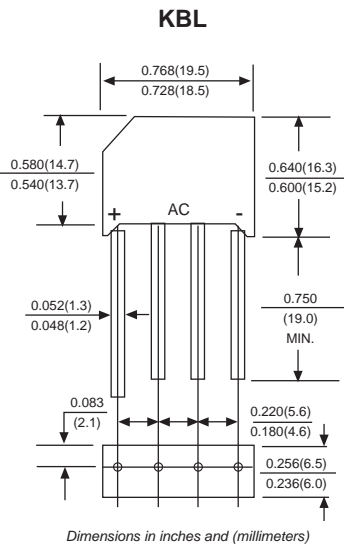
3. P.C. Board mounted with 0.5" x 0.5" (12x12mm) copper pads, 0.375" (9.5mm) lead length.

## RATINGS AND CHARACTERISTIC CURVES KBL6005-MS THRU KBL610-MS



The curve graph is for reference only.

PACKAGE MECHANICAL DATA



REELSPECIFICATION

P/N	PKG	QTY
KBL6005-MS THRU KBL610-MS	KBL	500

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