

■ Features

- Glass passivated chip
- Low reverse leakage current
- High surge current capability
- Reliable low cost construction utilizing molded plastic technique

■ Applications

- General purpose use in AC/DC bridge full wave rectification

■ Mechanical Data

- Case: KBL
- Polarity symbols being marked on body
- Molding compound meets UL 94V-0 flammability rating
- RoHS-compliant, Solder plated, solderable per MIL-STD-750, Method 2026



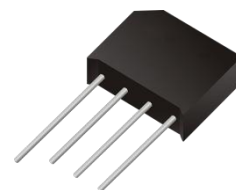
Reverse Voltage

50-1000 V

Forward Current

4.0 A max

Appearance Image



■ Marking

- KBL4xx(005~10)

■ Maximum Ratings @ Ta = 25°C unless otherwise noted

PARAMETER	SYMBOL	UNIT	KBL4005	KBL401	KBL402	KBL404	KBL406	KBL408	KBL410
Repetitive peak reverse voltage	V_{RRM}	V	50	100	200	400	600	800	1000
Maximum RMS voltage	V_{RMS}	V	35	70	140	280	420	560	700
Maximum DC blocking Voltage	V_{DC}	V	50	100	200	400	600	800	1000
Maximum average output current@60Hz sine wave, resistance load	$I_{F(AV)}$	A	4.0						
Peak forward surge current 8.3 ms single half sine wave superimposed on rated load	I_{FSM}	A	125						
Peak forward surge current 1.0 ms single half sine wave superimposed on rated load		A	250						
Current squared time @1ms≤t<8.3ms Tj=25°C, Rating of per diode	I^2t	A²S	64.84						
Storage temperature	T_{stg}	°C	-55~+150						
Junction temperature	T_j	°C	-55~+150						

■ Electrical Characteristics @ Ta = 25°C unless otherwise noted

PARAMETER	TEST CONDITIONS	SYMBOL	UNIT	KBL4005	KBL401	KBL402	KBL404	KBL406	KBL408	KBL410
Maximum instantaneous forward voltage	$I_F=2.0A$	V_F	V	1.0						
Maximum DC reverse current at rated DC blocking voltage	$V_R=V_{DC}$, Tj=25°C	I_R	μA	5						
	$V_R=V_{DC}$, Tj=100°C	I_R		500						

■ Characteristic Curve (Typical)

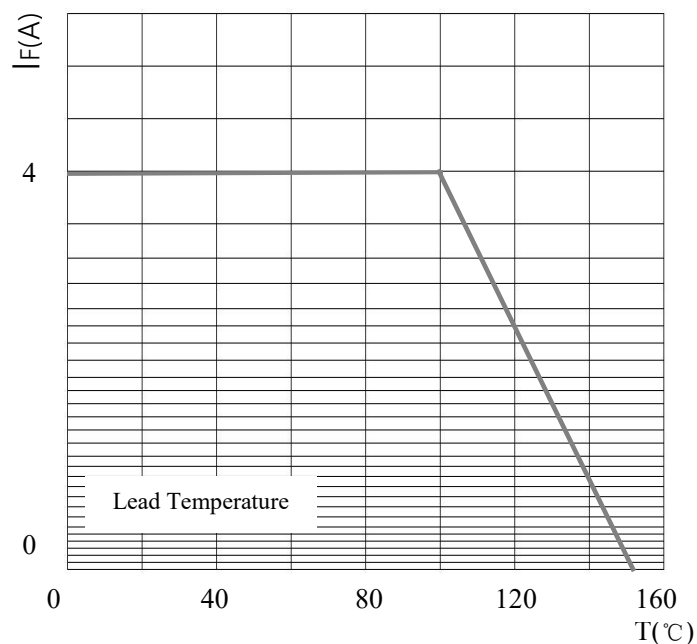


FIG1. Derating Curve For Output Rectified Current

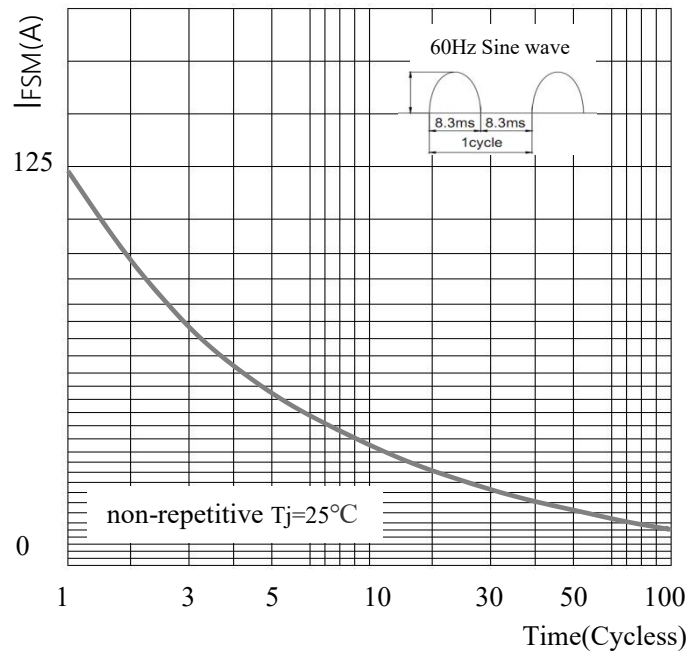


FIG2. Surge Forward Current Capability

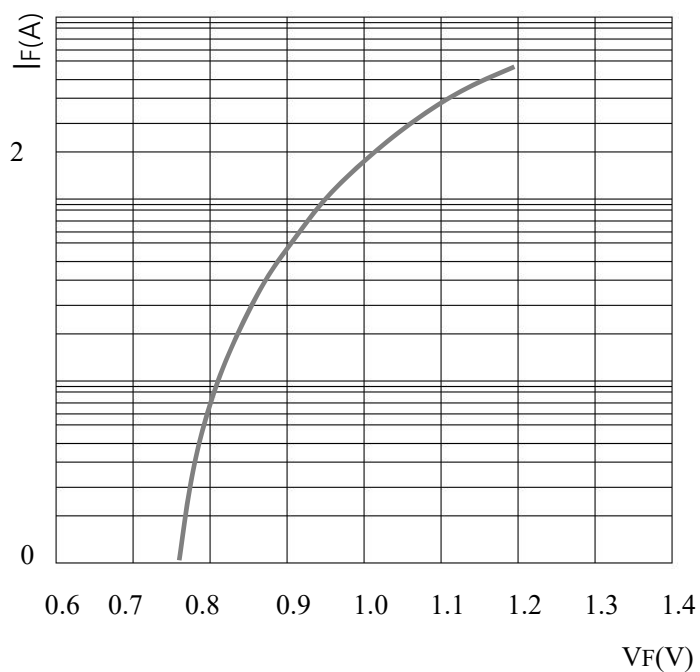


FIG3. Typical Forward Characteristics

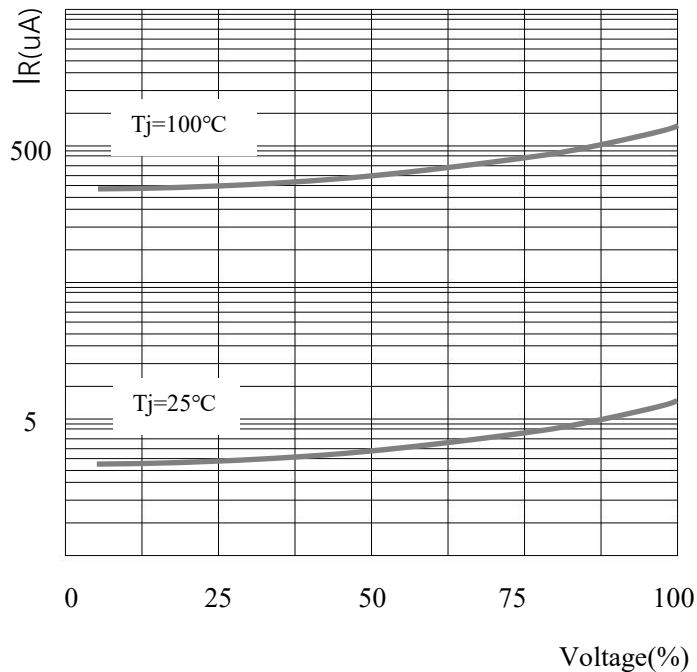
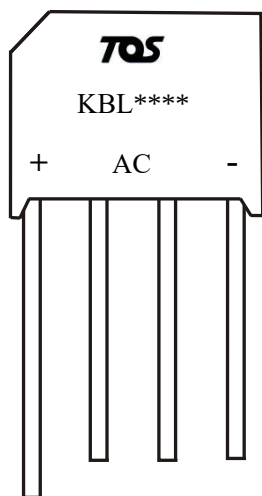


FIG4. Typical Reverse Characteristics

■ Marking and packet information

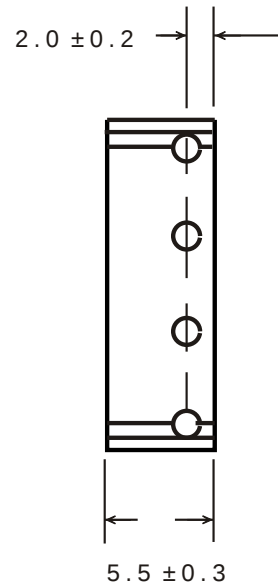
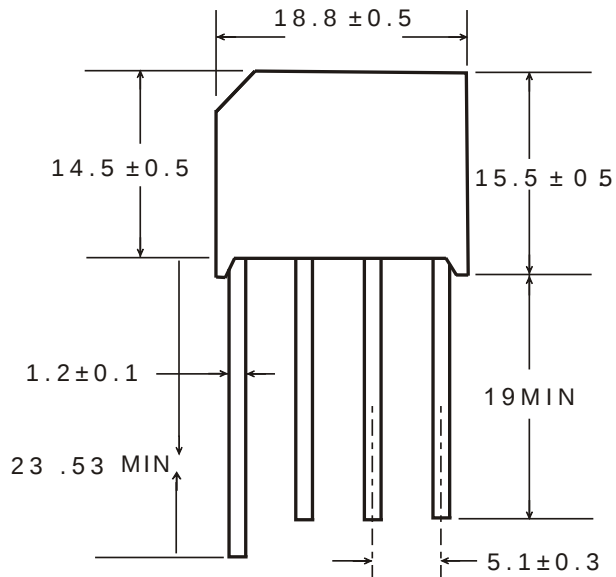


KBL****: Marking Model

TOS: Brand Logo

Packaging information	
每盒	500PCS
每箱	3000PCS
脚长定制	支持

■ KBL Package outline dimensions



Dimensions in millimeters

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