

**Features**

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Types up to 1000 V  $V_{RRM}$
- Ideal for printed circuit board
- Surge overload rating to 120 Amperes peak
- High temperature soldering guaranteed: 250°C/ 10 seconds
- Reliable, low cost construction

**Mechanical Data**

Case: Molded plastic

Weight: 0.15 oz, 4 g

Mounting torque: 5 inch-lb max

**KBJ Package**

**Maximum ratings, at  $T_J = 25\text{ }^\circ\text{C}$ , unless otherwise specified**

Parameter	Symbol	Conditions	KBJ4005G	KBJ401G	KBJ402G	KBJ404G	Unit
Repetitive peak reverse voltage	$V_{RRM}$		50	100	200	400	V
RMS reverse voltage	$V_{RMS}$		35	70	140	280	V
DC blocking voltage	$V_{DC}$		50	100	200	400	V
Continuous forward current	$I_F$	$T_C \leq 115\text{ }^\circ\text{C}$	4	4	4	4	A
Surge non-repetitive forward current, Half Sine Wave	$I_{FSM}$	$T_C = 25\text{ }^\circ\text{C}$ , $t_p = 8.3\text{ ms}$	120	120	120	120	A
Operating temperature	$T_J$		-55 to 150	-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$
Storage temperature	$T_{stg}$		-55 to 150	-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$

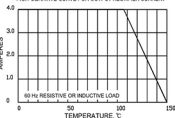
**Electrical characteristics, at  $T_J = 25\text{ }^\circ\text{C}$ , unless otherwise specified**

Parameter	Symbol	Conditions	KBJ4005G	KBJ401G	KBJ402G	KBJ404G	Unit
Diode forward voltage	$V_F$	$I_F = 4\text{ A}$ , $T_J = 25\text{ }^\circ\text{C}$	1	1	1	1	V
Reverse current	$I_R$	$V_R = 50\text{ V}$ , $T_J = 25\text{ }^\circ\text{C}$	5	5	5	5	$\mu\text{A}$
		$V_R = 50\text{ V}$ , $T_J = 125\text{ }^\circ\text{C}$	500	500	500	500	



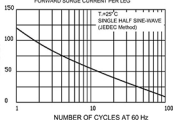
AVERAGE FORWARD OUTPUT CURRENT,  
AMPERES

FIG.1-OPERATIVE CURVE FOR OUTPUT RECTIFIER CURRENT



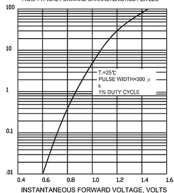
PEAK FORWARD SURGE CURRENT,  
AMPERES

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



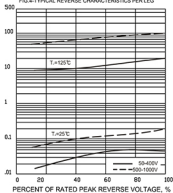
INSTANTANEOUS FORWARD CURRENT, AMPERES

FIG.3-TYPICAL FORWARD CHARACTERISTICS PER LEG



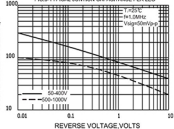
INSTANTANEOUS REVERSE CURRENT, MICROAMPERES

FIG.4-TYPICAL REVERSE CHARACTERISTICS PER LEG



JUNCTION CAPACITANCE, pF

FIG.5-TYPICAL JUNCTION CAPACITANCE PER LEG



TRANSIENT THERMAL IMPEDANCE, °C/W

FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE

