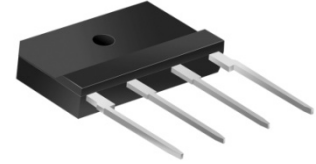


# Silicon Bridge Rectifiers

## KBJ4M

### Features

- Glass passivated junction
- High surge current capability
- Saves space on printed circuit boards
- High soldering temperature guaranteed: 260°C @ 10s
- RoHS Compliant



### Mechanical Data

- Case: KBJ molded plastic
- Molding compound, UL flammability classification rating 94V-0
- Terminals: Leads solderable per MIL-STD-750

### Maximum Ratings (@T<sub>A</sub> = 25°C unless otherwise specified)

Parameter	Symbol	KBJ4M	Unit
Peak repetitive reverse voltage	V <sub>RRM</sub>	1000	V
RMS reverse voltage	V <sub>RMS</sub>	700	V
DC blocking voltage	V <sub>DC</sub>	1000	V
Maximum average forward output current	I <sub>F(AV)</sub>	4.0	A
Peak forward surge current, 8.3ms single half-sine-wave	@T <sub>J</sub> = 25°C I <sub>FSM</sub>	135	A
I <sup>2</sup> t Rating for fusing	@T <sub>J</sub> = 25°C I <sup>2</sup> t	76	A <sup>2</sup> s

### Thermal Characteristics

Parameter	Symbol	KBJ4M	Unit
Typical thermal resistance*1,*2	R <sub>θJA</sub> *2	26	°C/W
	R <sub>θJC</sub> *1	4	
Operating junction temperature range	T <sub>J</sub>	-55 ~ +150	°C
Storage temperature range	T <sub>STG</sub>	-55 ~ +150	°C

Note \*1: Unit mounted on p.c.b. of 65mm x 50mm x 2.4mm with aluminum plate heat sink

Note \*2: Unit mounted on p.c.b. without heat sink

## Silicon Bridge Rectifiers

**KBJ4M**

### Electrical Characteristics (@ $T_A = 25^\circ\text{C}$ unless otherwise specified)

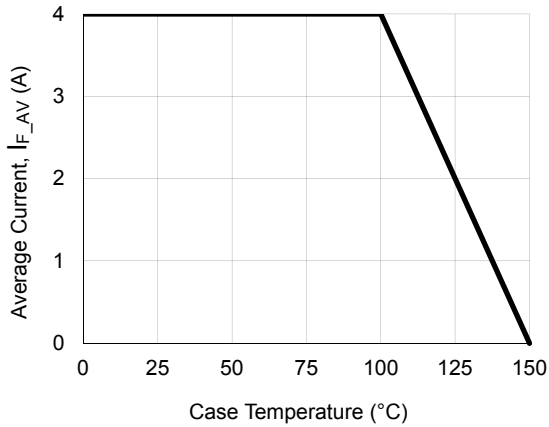
Parameter	Symbol	Test Condition	Typ.	Max.	Unit	
Instantaneous Forward Voltage	$V_F$	$I_F = 2.0\text{A}$ Per Diode	-	1.0	V	
		$I_F = 4.0\text{A}$ Per Diode	-	1.1		
Reverse current	$I_R$	Rated $V_R$	@ $T_A = 25^\circ\text{C}$	-	10	$\mu\text{A}$
			@ $T_A = 125^\circ\text{C}$	-	500	

# Silicon Bridge Rectifiers

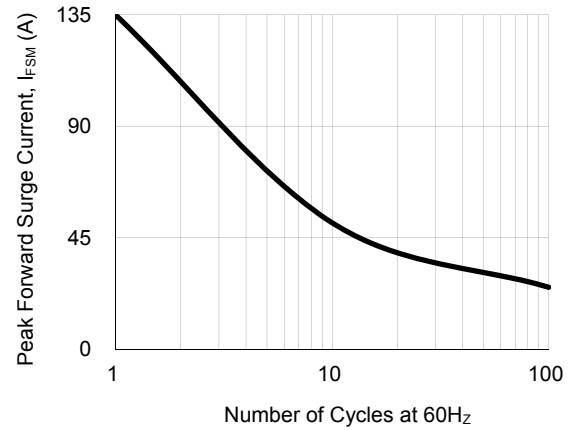
## KBJ4M

### Ratings and Characteristic Curves (@ $T_A=25^\circ\text{C}$ unless otherwise noted)

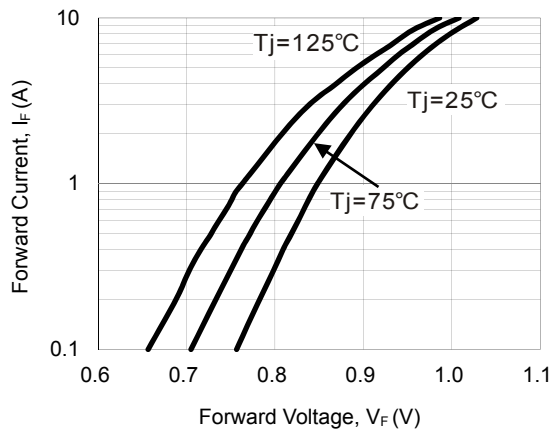
**Fig.1 Forward Current Derating Curve**



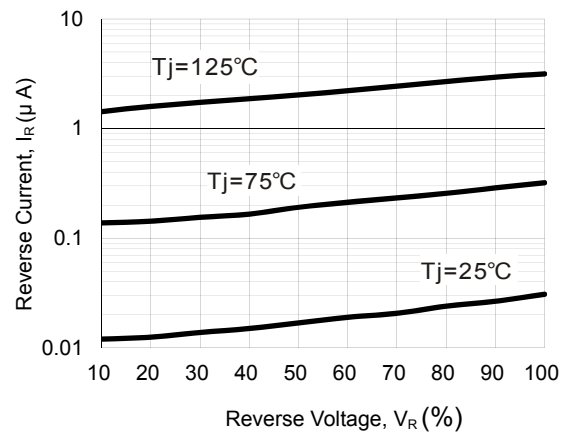
**Fig.2 Surge Current Derating Curve**



**Fig.3 Typical Forward Voltage Characteristic**



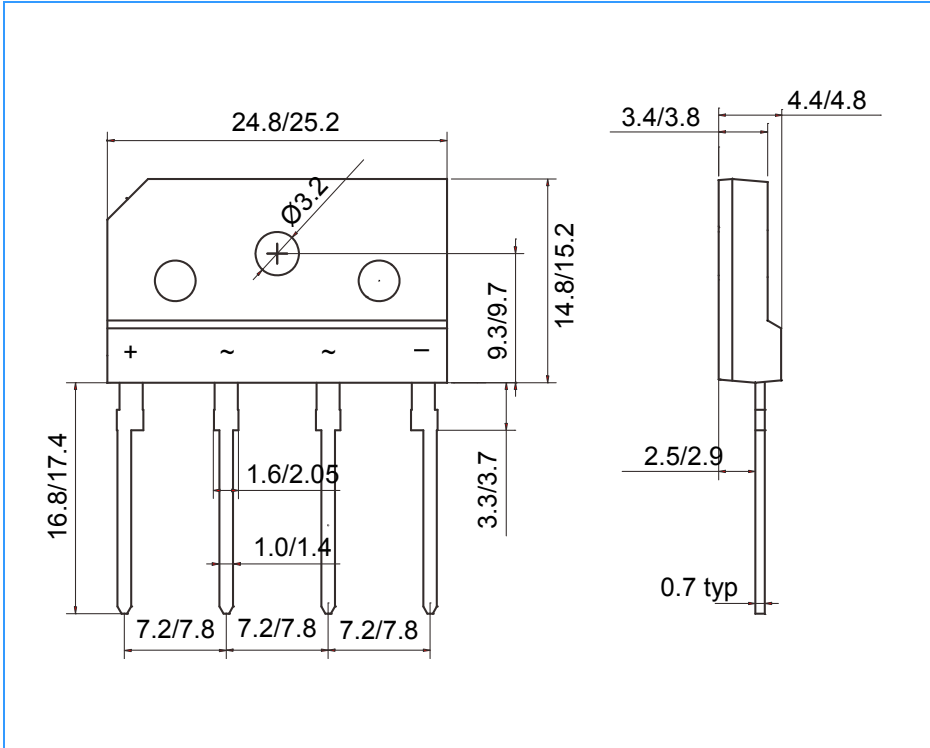
**Fig.4 Typical Reverse Characteristic**



# Silicon Bridge Rectifiers

# KBJ4M

## Package Outline Dimensions (unit: mm)



## Ordering Information

Part Number	Marking	Package
KBJ4M	KBJ4M	KBJ