

# Silicon Bridge Rectifier

 $V_{RRM} = 50\text{ V} - 1000\text{ V}$ 
 $I_F = 3\text{ A}$ 

## Features

- Types up to 1000 V  $V_{RRM}$
- Ideal for printed circuit board
- Surge overload rating to 65 Amps peak
- High temperature soldering guaranteed 250°C/ 10 seconds
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Reliable, low cost construction utilizing molded plastic technique

## KBPM Package



## Mechanical Data

Leads: Tin plated copper

Weight: 0.047 oz, 1.33 g

Mounting position: Any

Terminals: Leads solderable per MIL-STD-202, Method 208

Polarity: Polarity marked on body

## Maximum ratings, at $T_j = 25\text{ °C}$ , unless otherwise specified

Parameter	Symbol	Conditions	KBPM306G	KBPM308G	KBPM310G	Unit
Repetitive peak reverse voltage	$V_{RRM}$		600	800	1000	V
RMS reverse voltage	$V_{RMS}$		420	560	700	V
DC blocking voltage	$V_{DC}$		600	800	1000	V
Continuous forward current	$I_F$	$T_C \leq 65\text{ °C}$	3	3	3	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	$T_C = 25\text{ °C}$ , $t_p = 8.3\text{ ms}$	80	80	80	A
Operating temperature	$T_j$		-55 to 150	-55 to 150	-55 to 150	°C
Storage temperature	$T_{stg}$		-55 to 150	-55 to 150	-55 to 150	°C

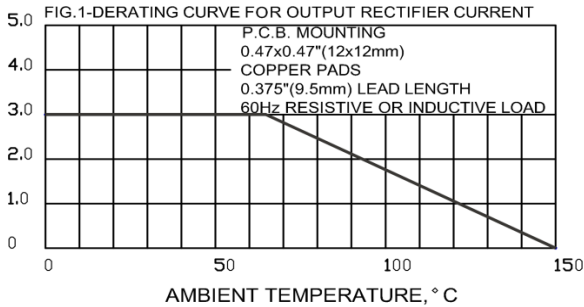
## Electrical characteristics, at $T_j = 25\text{ °C}$ , unless otherwise specified

Parameter	Symbol	Conditions	KBPM306G	KBPM308G	KBPM310G	Unit
Diode forward voltage	$V_F$	$I_F = 3\text{ A}$ , $T_j = 25\text{ °C}$	1.1	1.1	1.1	V
Reverse current	$I_R$	$V_R = 50\text{ V}$ , $T_j = 25\text{ °C}$	5	5	5	$\mu\text{A}$
		$V_R = 50\text{ V}$ , $T_j = 125\text{ °C}$	500	500	500	

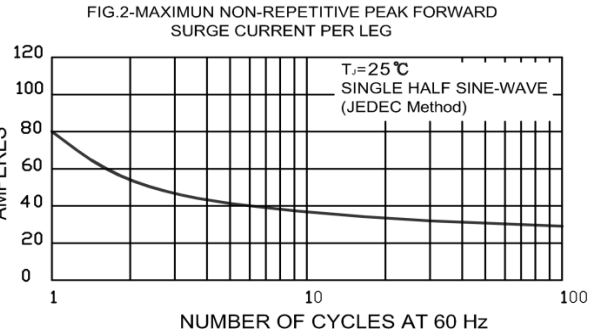
## Thermal characteristics

Thermal resistance, junction - case	$R_{thJA}$		14.0	14.0	14.0	°C/W
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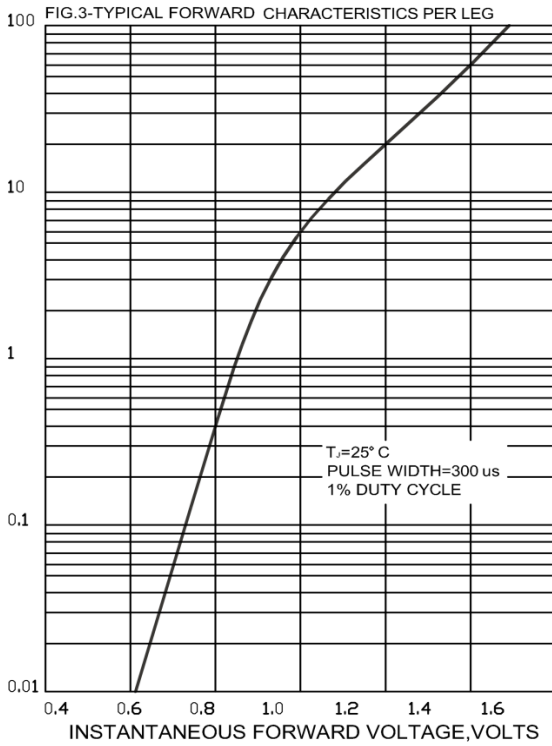
AVERAGE FORWARD CURRENT, AMPERES



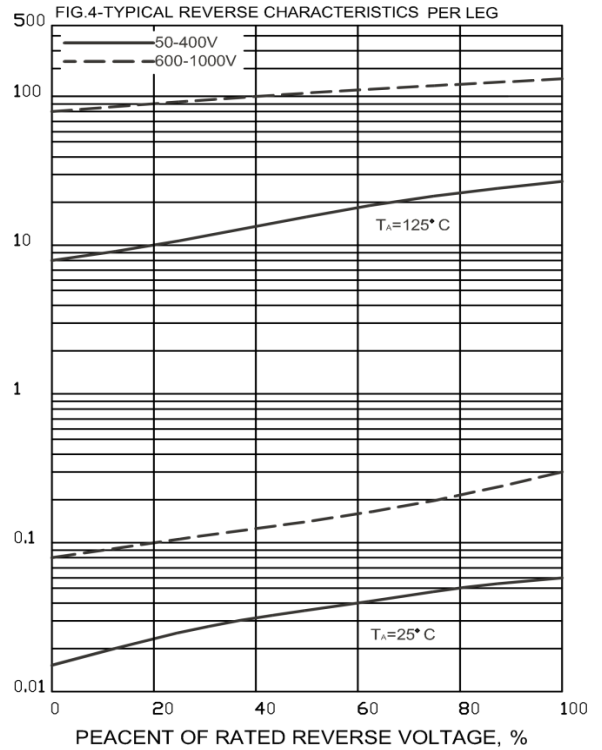
PEAK FORWARD SURGE CURRENT, AMPERES



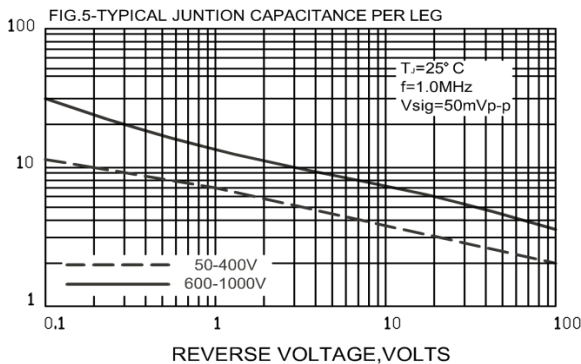
INSTANTANEOUS FORWARD CURRENT, AMPERES



INSTANTANEOUS REVERSE CURRENT, MICROAMPERES



JUNCTION CAPACITANCE, pF



TRANSIENT THERMAL IMPEDANCE, °C/W

