

## Silicon Bridge Rectifier

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

$I_F = 15\text{ A}$

### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- Types up to 1000 V  $V_{RRM}$
- Ideal for printed circuit board
- High surge overload rating
- High temperature soldering guaranteed: 260°C/ 10 seconds, 0.375(9.5mm) lead length
- Glass passivated chip junction
- High case dielectric strength 1500  $V_{RMS}$

### GBU Package



### Mechanical Data

Case: Molded plastic body over passivated junctions

Mounting position: Any

Terminals: Plated leads, solderable per MIL-STD-750

Method 2026 guaranteed

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

Parameter	Symbol	Conditions	GBU15J	GBU15K	GBU15M	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	$I_F$	$T_C \leq 100\text{ °C}$	15	15	15	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	$T_C = 25\text{ °C}$ , $t_p = 8.3\text{ ms}$	240	240	240	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

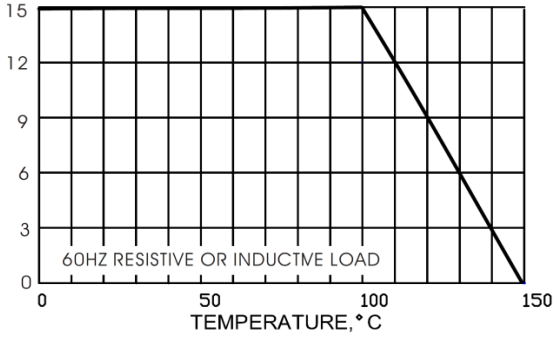
Parameter	Symbol	Conditions	GBU15J	GBU15K	GBU15M	Unit
Diode forward voltage	$V_F$	$I_F = 15\text{ A}$ , $T_j = 25\text{ °C}$	1.1	1.1	1.1	V
Reverse current	$I_R$	$V_R = 50\text{ V}$ , $T_j = 25\text{ °C}$ $V_R = 50\text{ V}$ , $T_j = 125\text{ °C}$	5 500	5 500	5 500	$\mu\text{A}$

### Thermal characteristics

Thermal resistance, junction - case	$R_{thJC}$		2.2	2.2	2.2	°C/W
-------------------------------------	------------	--	-----	-----	-----	------

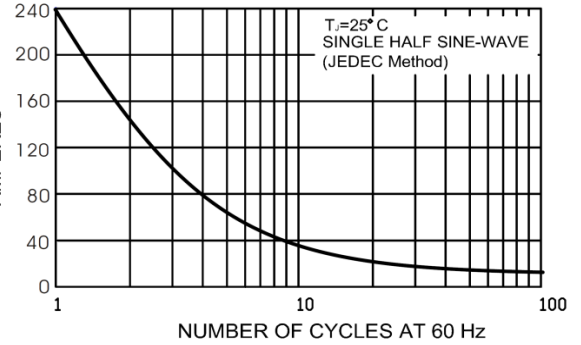
AVERAGE FORWARD OUTPUT CURRENT,  
AMPERES

FIG.1-DERIVATIVE CURVE FOR OUTPUT RECTIFIER CURRENT



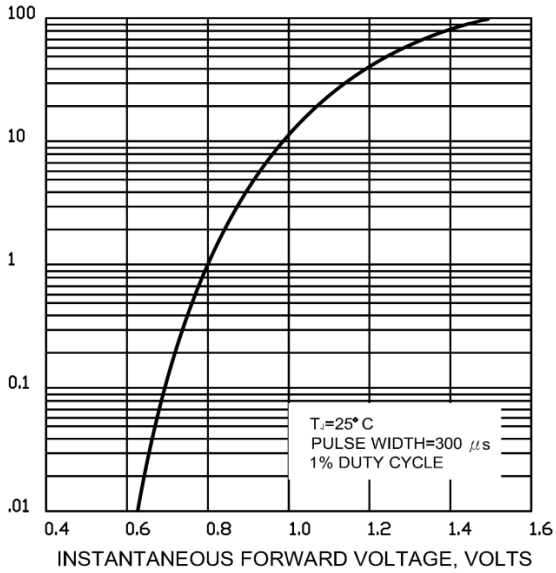
PEAK FORWARD SURGE CURRENT,  
AMPERES

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

