

# Silicon Bridge Rectifier

 $V_{RRM} = 50\text{ V} - 1000\text{ V}$ 
 $I_F = 1\text{ A}$ 

## Features

- Types up to 1000 V  $V_{RRM}$
- Ideal for printed circuit board
- High surge current capability
- High temperature soldering guaranteed: 250°C/ 10 seconds
- Small size, simple installation

**DB Package**


## Mechanical Data

Case: Molded plastic

Polarity: Polarity symbols marked on body

Mounting position: Any

Terminals: Plated leads, solderable per MIL-STD-202

Method 208 guaranteed

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

Parameter	Symbol	Conditions	DB105G	DB106G	DB107G	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	$I_F$	$T_C \leq 40\text{ °C}$	1	1	1	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	$T_C = 25\text{ °C}$ , $t_p = 8.3\text{ ms}$	30	30	30	A
Operating temperature	$T_j$		-65 to 150	-65 to 150	-65 to 150	°C
Storage temperature	$T_{stg}$		-65 to 150	-65 to 150	-65 to 150	°C

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

Parameter	Symbol	Conditions	DB105G	DB106G	DB107G	Unit
Diode forward voltage	$V_F$	$I_F = 1\text{ A}$ , $T_j = 25\text{ °C}$	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

Parameter	Symbol	Conditions	DB105G	DB106G	DB107G	Unit
Thermal resistance, junction - case	$R_{thJC}$		20.00	20.00	20.00	°C/W

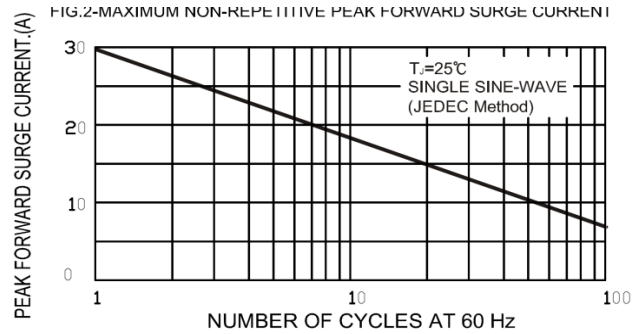
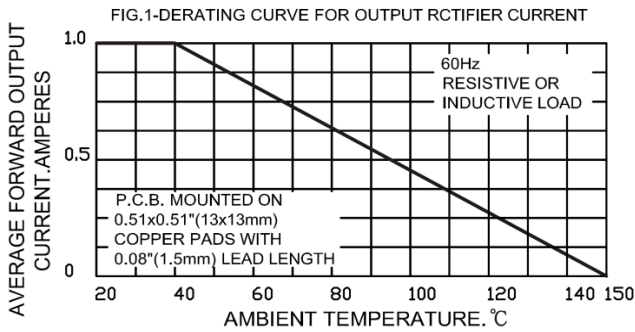


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

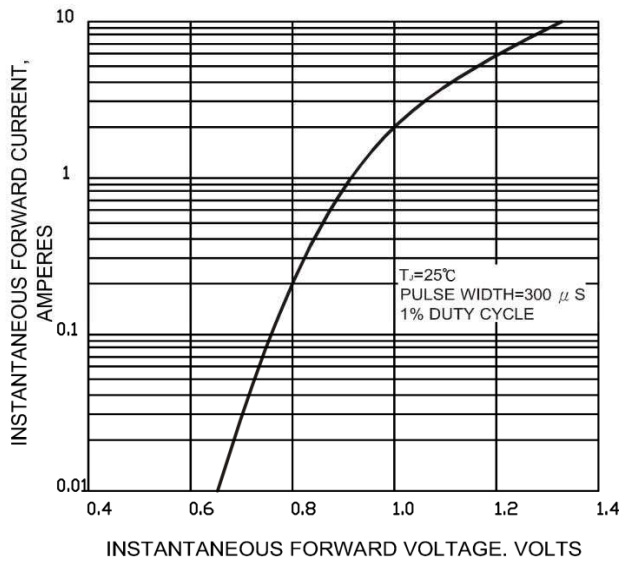


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

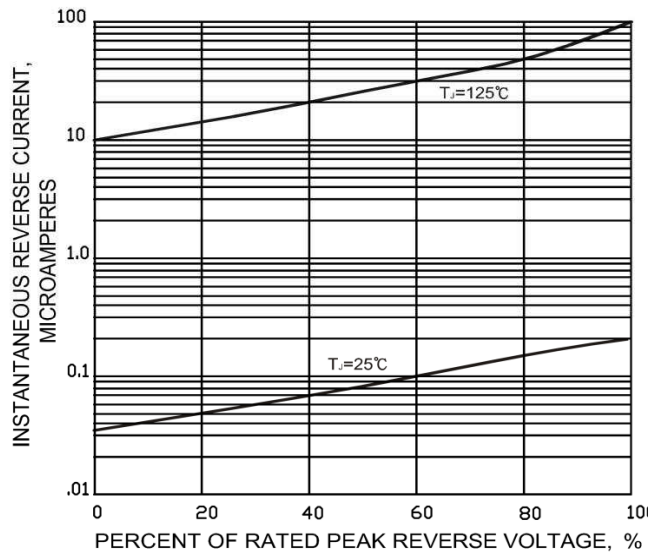


FIG.5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

