

# America Semiconductor



"In America Semi We Trust"

MANUFACTURER OF WORLD CLASS HIGH POWER SEMICONDUCTORS

## America Semiconductor

Silicon Bridge Rectifier

### DB105G thru DB107G

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

#### 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

#### 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

DB Package



#### Maximum ratings, at $T_j = 25^\circ\text{C}$ , 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	$I_F$	$T_C \leq 40^\circ\text{C}$	1	1	1	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	$T_C = 25^\circ\text{C}, t_p = 8.3\text{ ms}$	30	30	30	A
Operating temperature	$T_j$		-65 to 150	-65 to 150	-65 to 150	$^\circ\text{C}$
Storage temperature	$T_{stg}$		-65 to 150	-65 to 150	-65 to 150	$^\circ\text{C}$

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

Parameter	Symbol	Conditions	DB105G	DB106G	DB107G	Unit
Diode forward voltage	$V_F$	$I_F = 1\text{ A}, T_j = 25^\circ\text{C}$	1.1	1.1	1.1	V
Reverse current	$I_R$	$V_R = 50\text{ V}, T_j = 25^\circ\text{C}$ $V_R = 50\text{ V}, T_j = 125^\circ\text{C}$	5	5	5	$\mu\text{A}$

#### Thermal characteristics

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

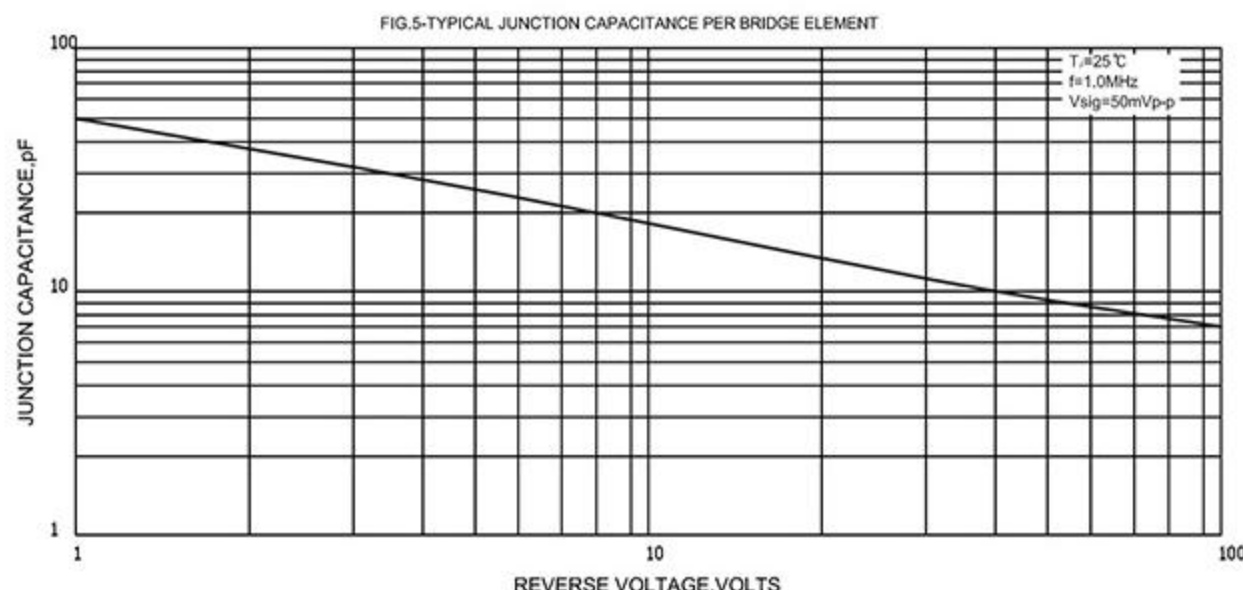
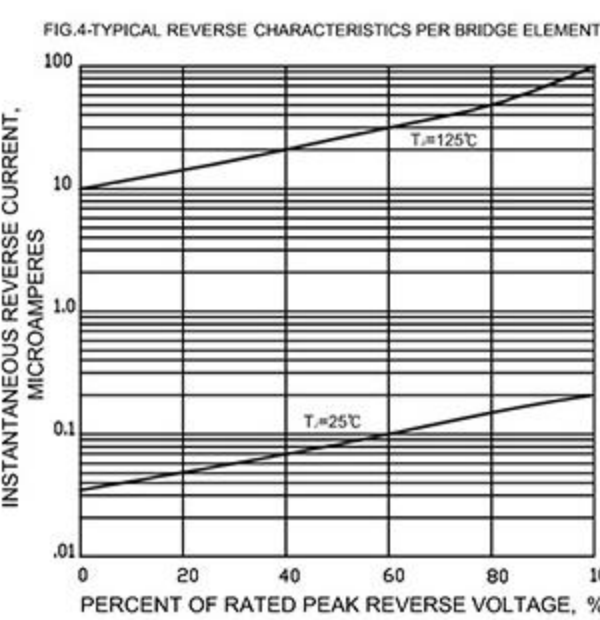
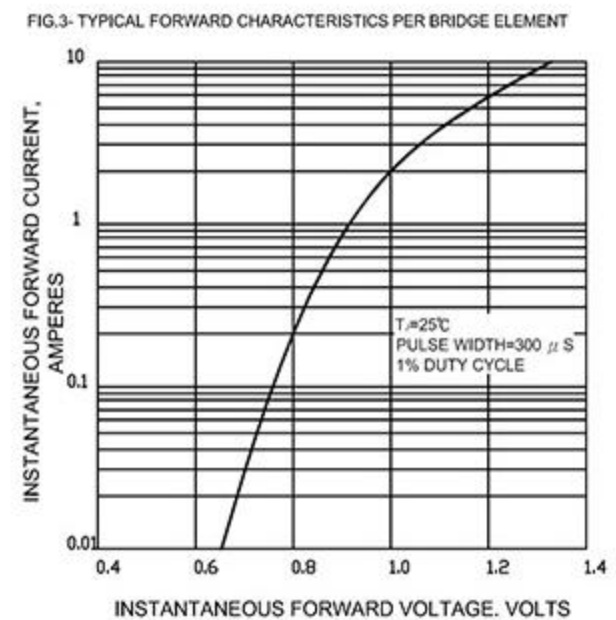
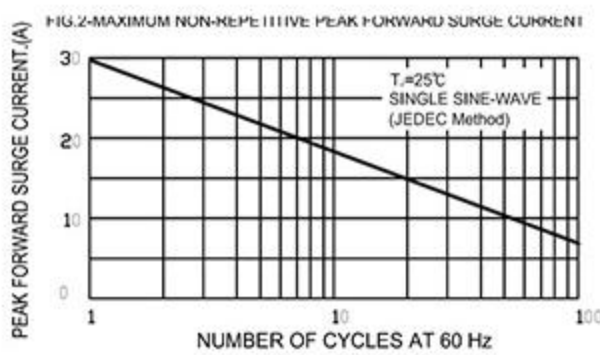
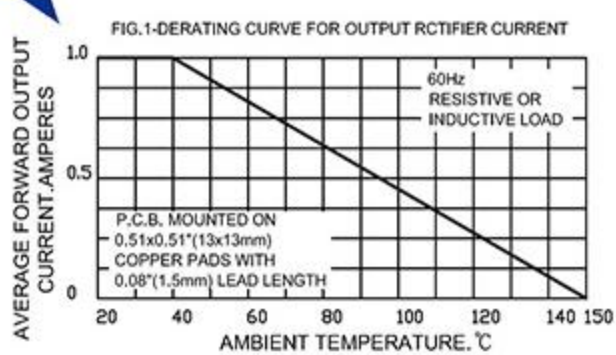


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