

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 $T_j = 25\text{ }^\circ\text{C}$, 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	$T_C \leq 40\text{ }^\circ\text{C}$	1	1	1	A
Surge non-repetitive forward current, Half Sine Wave	$I_{F,SM}$	$T_C = 25\text{ }^\circ\text{C}$, $t_p = 8.3\text{ ms}$	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 $T_j = 25\text{ }^\circ\text{C}$, unless otherwise specified

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

Thermal characteristics

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

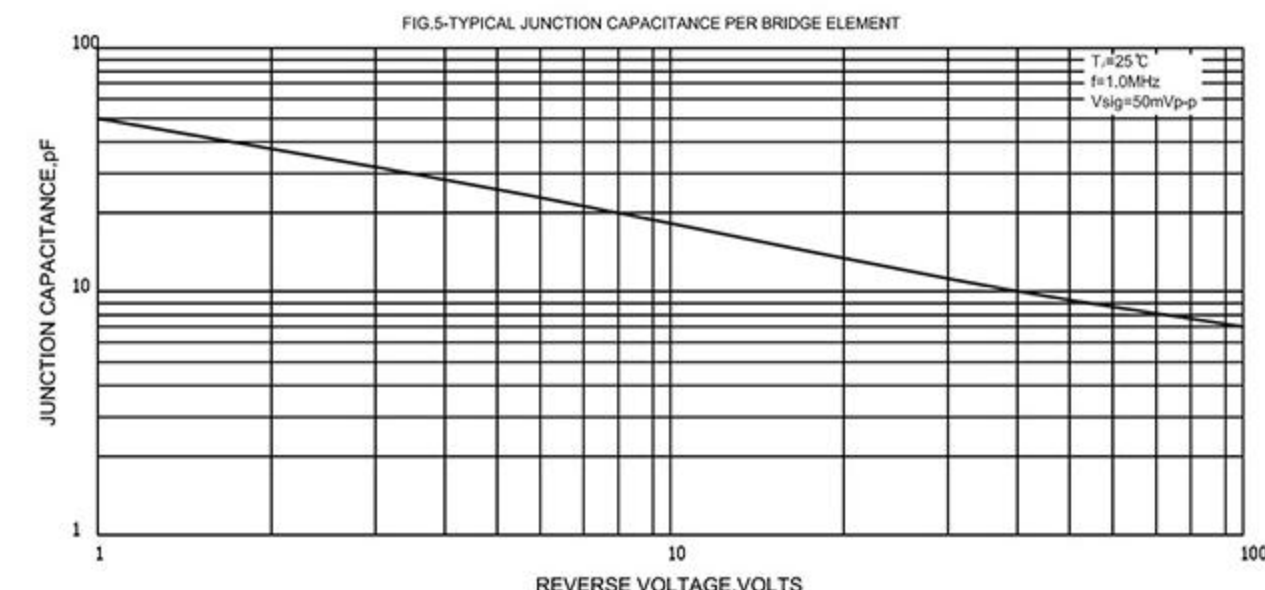
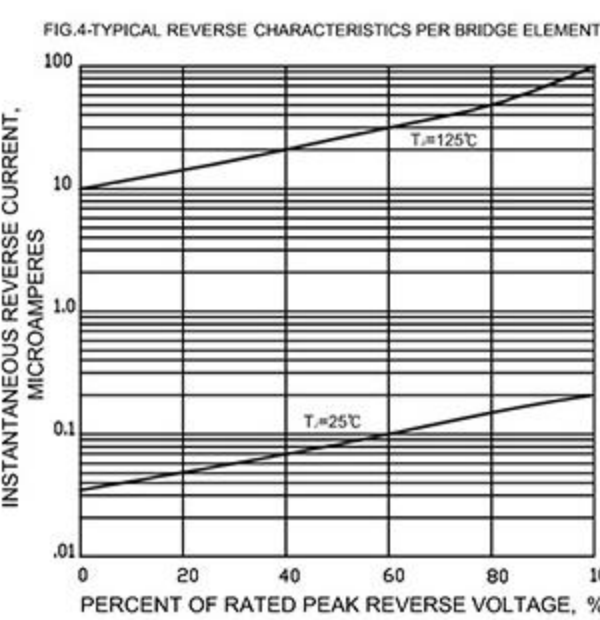
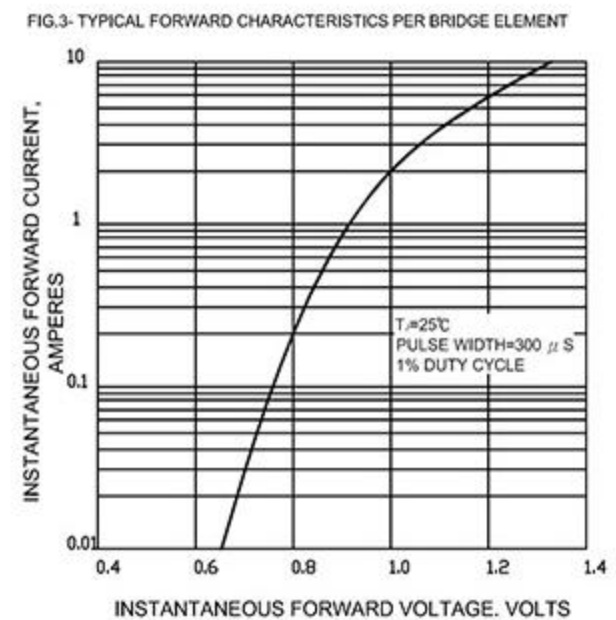
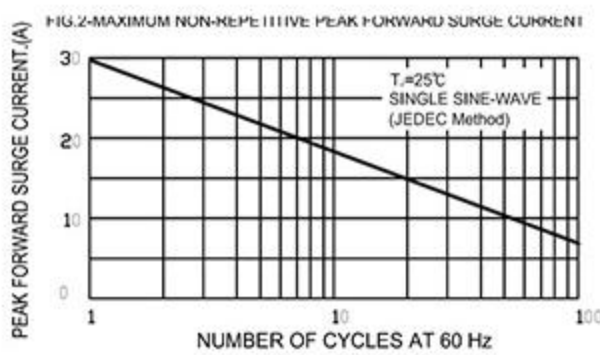
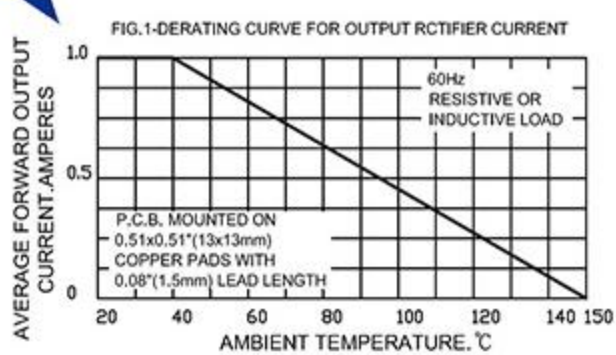


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