

**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

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 $T_j = 25 \text{ }^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Conditions	DB105G	DB106G	DB107G	Unit
Repetitive peak reverse voltage	V_{RRM}		600	800	1000	V
RMS reverse voltage	V_{RRMS}		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_{FSM}	$T_C = 25 \text{ }^\circ\text{C}$, $t_p = 8.3 \text{ ms}$	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	$V_R = 50 \text{ V}$, $T_j = 25 \text{ }^\circ\text{C}$	5	5	5	μA
		$V_R = 50 \text{ V}$, $T_j = 125 \text{ }^\circ\text{C}$	500	500	500	

Thermal characteristics

Thermal resistance, junction - case	$R_{\theta JC}$		20.00	20.00	20.00	$^\circ\text{C/W}$
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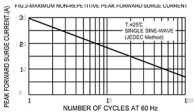
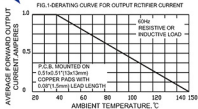


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

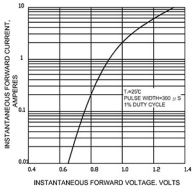


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

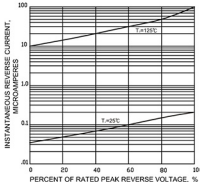


FIG.5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

