

Single Phase Glass Passivated Silicon Bridge Rectifier

$V_{RRM} = 50\text{ V} - 400\text{ V}$

$I_O = 1\text{ A}$

Features

- Ideal for printed circuit board
- Reliable low cost construction utilizing molded plastic technique
- High surge current capability
- Small size, simple installation
- Types from 50 V up to 400 V V_{RRM}
- Not ESD Sensitive

Mechanical Data

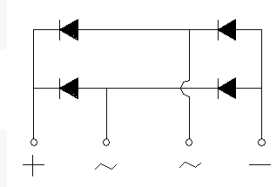
Case: Molded plastic

Terminals: Plated terminals, solderable per MIL-STD-202, Method 208

Polarity: Polarity symbols marked on the body

Mounting position: Any

DB Package



Maximum ratings at $T_c = 25\text{ }^\circ\text{C}$, unless otherwise specified

Parameter	Symbol	Conditions	DB101G	DB102G	DB103G	DB104G	Unit
Repetitive peak reverse voltage	V_{RRM}		50	100	200	400	V
RMS reverse voltage	V_{RMS}		35	70	140	280	V
DC blocking voltage	V_{DC}		50	100	200	400	V
Operating temperature	T_j		-55 to 150	-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$
Storage temperature	T_{stg}		-55 to 150	-55 to 150	-55 to 150	-55 to 150	$^\circ\text{C}$

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

Single phase, half sine wave, 60 Hz, resistive or inductive load

For capacitive load derate current by 20%

Parameter	Symbol	Conditions	DB101G	DB102G	DB103G	DB104G	Unit
Maximum average forward rectified current	I_O	$T_a = 40\text{ }^\circ\text{C}$	1.0	1.0	1.0	1.0	A
Peak forward surge current	I_{FSM}	$t_p = 8.3\text{ ms}$, half sine	30	30	30	30	A
Maximum instantaneous forward voltage drop	V_F	$I_F = 1.0\text{ A}$	1.1	1.1	1.1	1.1	V
Maximum DC reverse current at rated DC blocking voltage	I_R	$T_a = 25\text{ }^\circ\text{C}$ $T_a = 125\text{ }^\circ\text{C}$	5 500	5 500	5 500	5 500	μA
Typical junction capacitance	C_j		25	25	25	25	pF
Typical thermal resistance	$R_{\theta JC}$		20	20	20	20	$^\circ\text{C/W}$

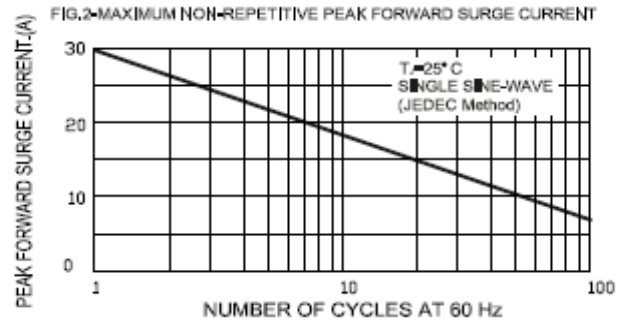
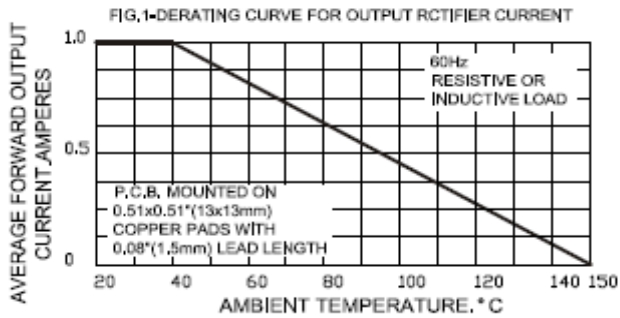


FIG. 3-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

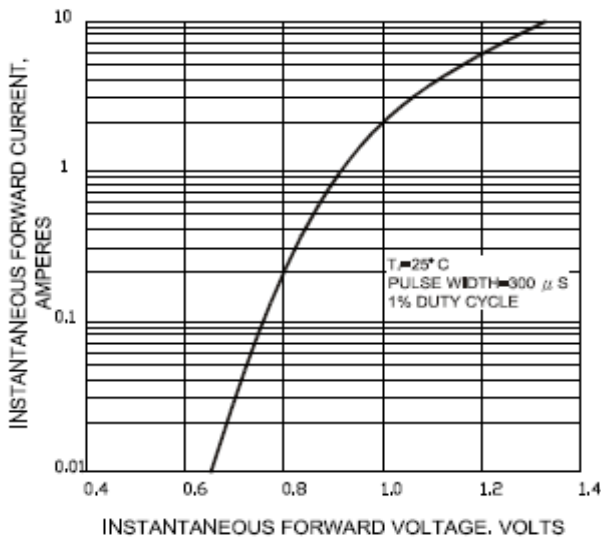


FIG. 4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER BRIDGE ELEMENT

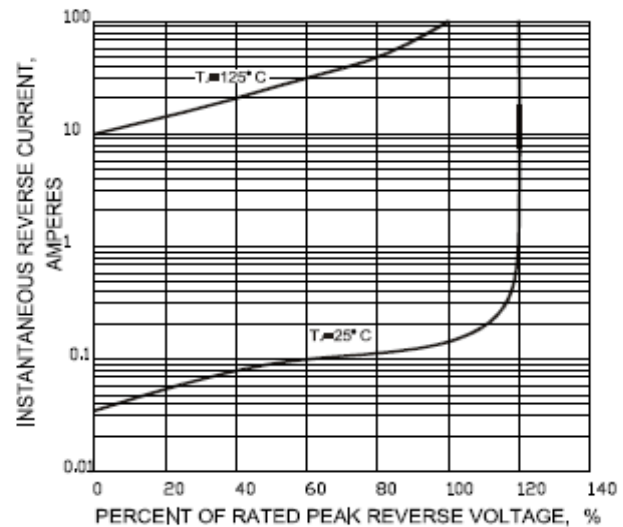
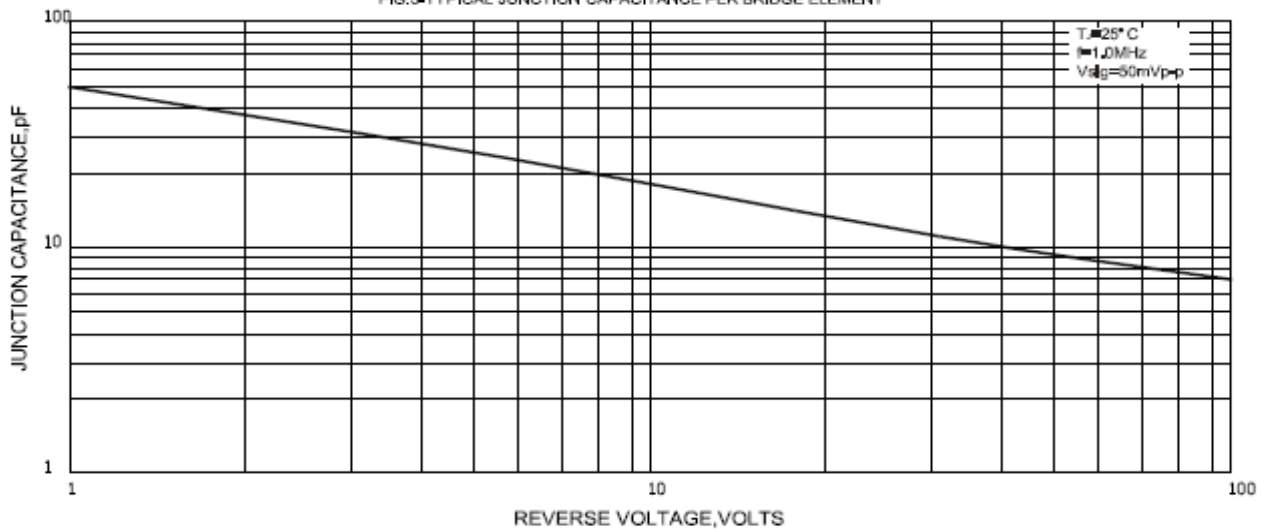


FIG. 5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.

