Single Phase Glass Passivated Silicon Bridge Rectifier

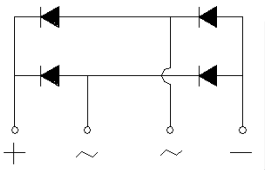
V_{RRM} = 50 V - 400 V

I_O = 1.5 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

DB Package



Mechanical Data

Case: Molded plastic

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

Polarity: Polarrity symbols marked on the body

Mounting position: Any

Maximum ratings at Tc = 25 °C, unless otherwise specified

Parameter	Symbol	Conditions	DB151G	DB152G	DB153G	DB154G	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	°C
Storage temperature	T_{stg}		-55 to 150	-55 to 150	-55 to 150	-55 to 150	°C

Electrical characteristics at Tc = 25 °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	DB151G	DB152G	DB153G	DB154G	Unit
Maximum average forward rectified current	I_O	T_a = 40 °C	1.5	1.5	1.5	1.5	A
Peak forward surge current	I_{FSM}	t_p = 8.3 ms, half sine	50	50	50	50	A
Maximum instantaneous forward voltage drop	V_F	I_F = 1.5 A	1.1	1.1	1.1	1.1	V
Maximum DC reverse current at rated DC blocking voltage	I_R	T_a = 25 °C T_a = 125 °C	5 500	5 500	5 500	5 500	µA
Rating for fusing	I^2t	t < 8.3 ms	10	10	10	10	A^2sec
Typical junction capacitance	C_j		14	14	14	14	pF
Typical thermal resistance	$R_{\Theta JA}$		36	36	36	36	°C/W

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIER CURRENT

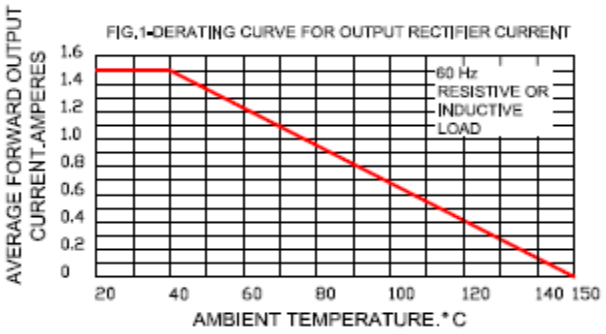


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

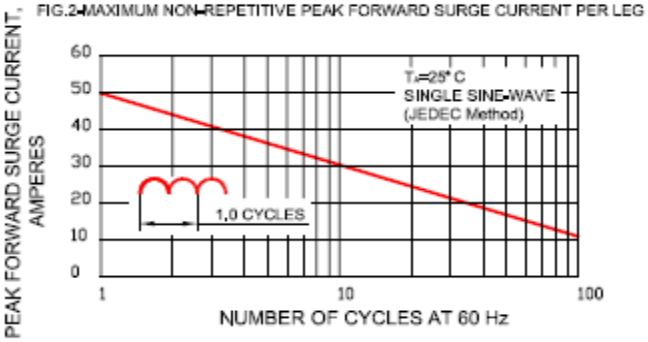


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER LEG

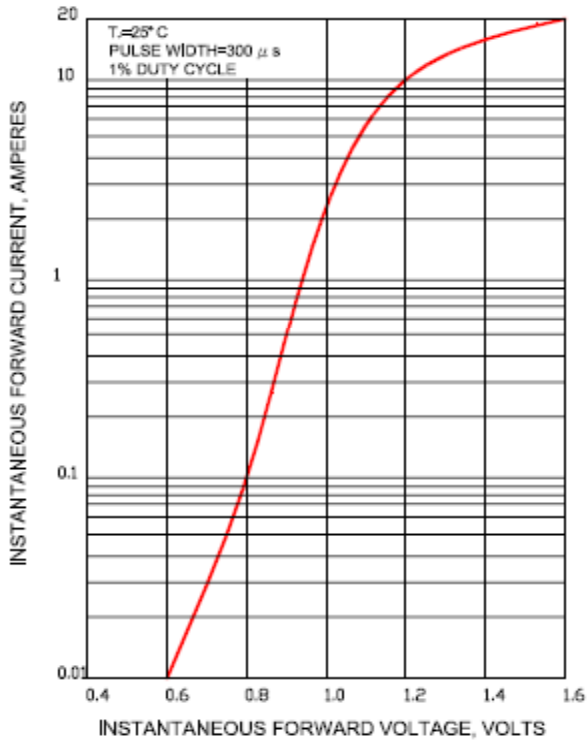


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER LEG

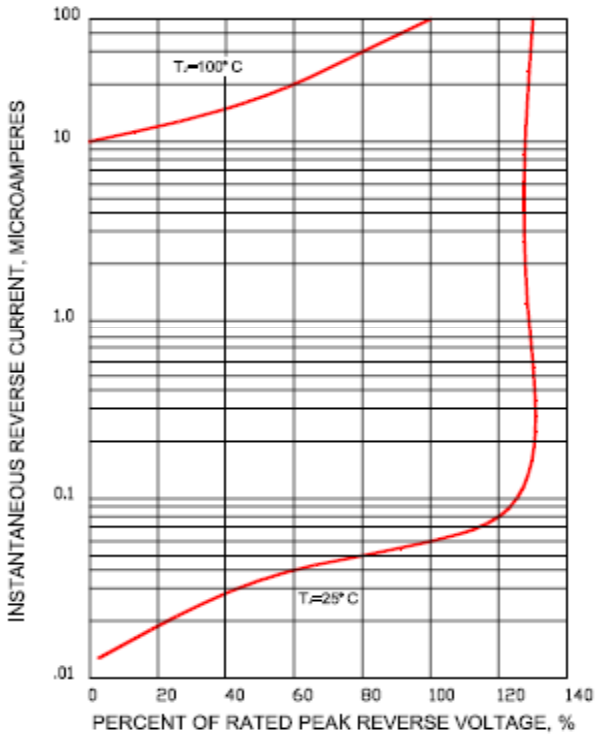


FIG.5-TYPICAL JUNCTION CAPACITANCE PER LEG

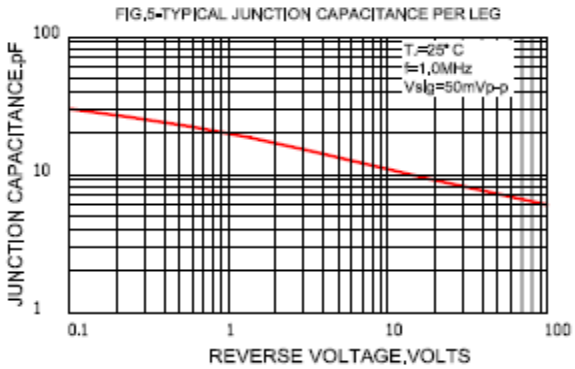
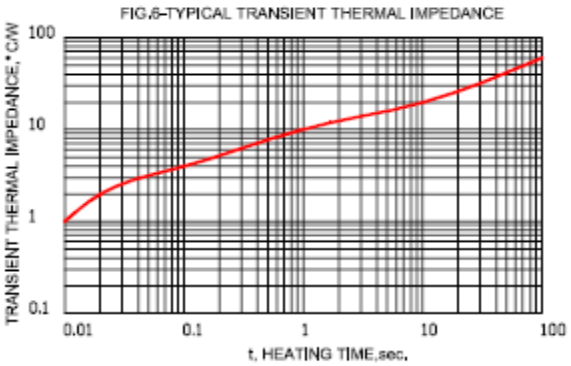
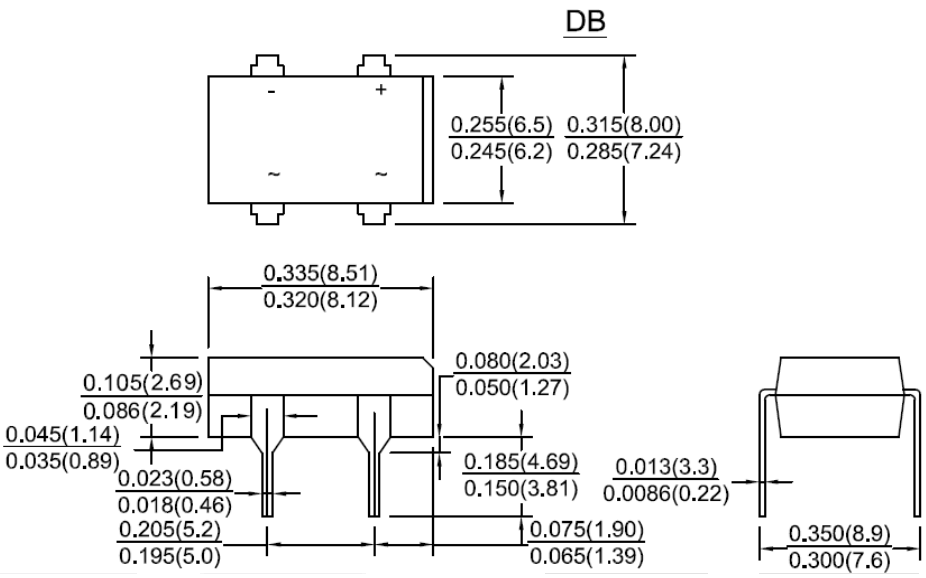
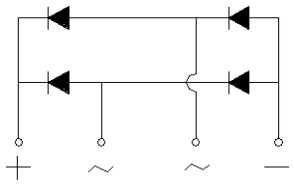


FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE



Package dimensions and terminal configuration

Product is marked with part number and terminal configuration.



Dimensions in inches and (millimeters)