VI. Bridge Rectifier

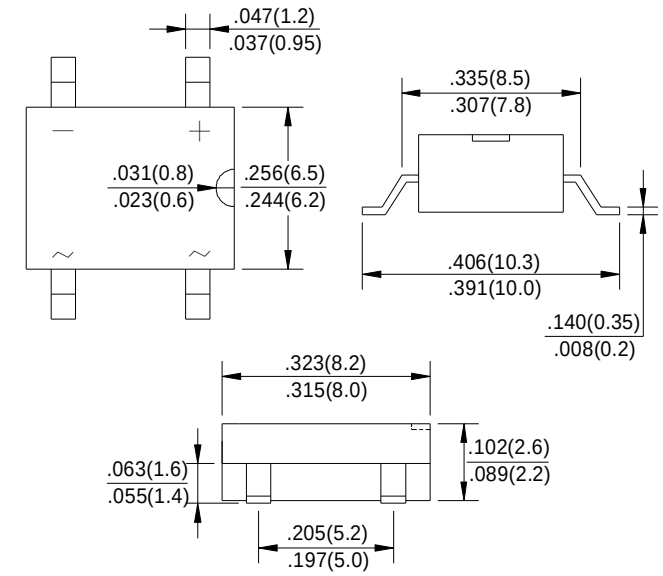
2.0A SMD Glass Passivated Bridge Rectifier (Low Profile Type)
DF2005SL~DF210SL (Package: DFS)

FEATURES

- Glass passivated die construction
- Reliable low cost construction utilizing molded plastic technique
- High surge current capability
- Small size, simple installation
- Plastic material – UL Recognition Flammability Classification 94V-0

MECHANICAL DATA

- Case : Molded plastic
- Terminals : Plated terminals
- Polarity : Polarity symbols marked on body
- Mounting position : Any
- Handling precaution : None
- Weight : 0.38 grams



Case: DFS
Dimensions in inches and (millimeters)

Ratings & Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified.
Single phase half-wave 60 Hz, resistive or inductive load, for capacitive load current derate by 20%.

Characteristics	Symbol	DF 2005SL	DF 201SL	DF 202SL	DF 204SL	DF 206SL	DF 208SL	DF 210SL	Units
Maximum recurrent peak reverse voltage	V_{RRM}	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	V_{RMS}	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	V_{DC}	50	100	200	400	600	800	1000	Volts
Maximum average forward rectified current at Ta = 40℃	Io	2.0							Amps
Peak forward surge current, 8.3ms single half sine-wave superimposed on rated load, (JEDEC Method)	I_{FSM}	60.0							Amps
Maximum instantaneous forward voltage drop per element at 2.0A	V_F	1.1							Volts
Maximum DC reverse current Tj= 25℃ at rated DC blocking voltage Tj= 125℃	I_R	10 500							μA
I^2t Rating for Fusing (t<8.3ms)	I^2t	10.4							A^2s
Typical junction capacitance per element (Note 1)	Cj	25							PF
Typical thermal resistance (Note 2)	Rth-JA	40							℃/ W
Operating junction and storage temperature range	Tj, Tstg	-55 to +150							℃

Notes:
1. Measured at 1.0 MHz and applied reverse voltage of 4.0 volts D.C.
2. Thermal resistance junction to ambient mounted on PC Board with 13.0 x 13.0 mm copper pads.

Ratings and Characteristic Curves of DF2005SL~DF210SL

FIG.1-DERATING CURVE FOR
OUTPUT RECTIFIED CURRENT

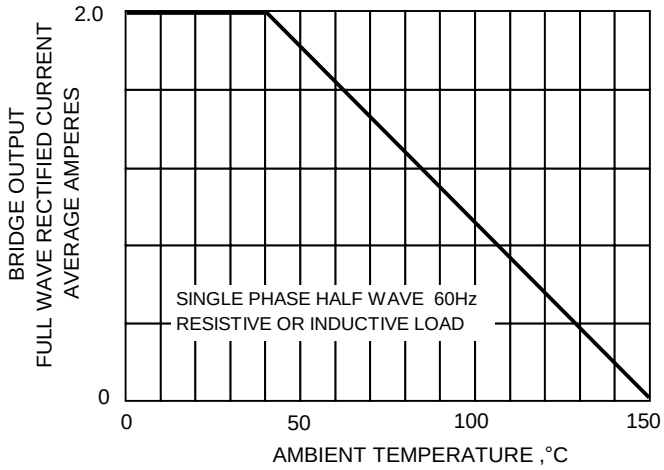


FIG.2-MAXIMUM NON-REPETITIVE PEAK
FORWARD SURGE CURRENT

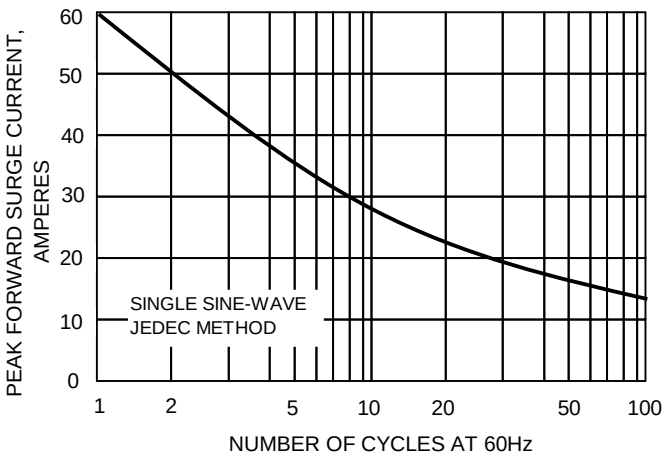


FIG.3-TYPICAL JUNCTION CAPACITANCE

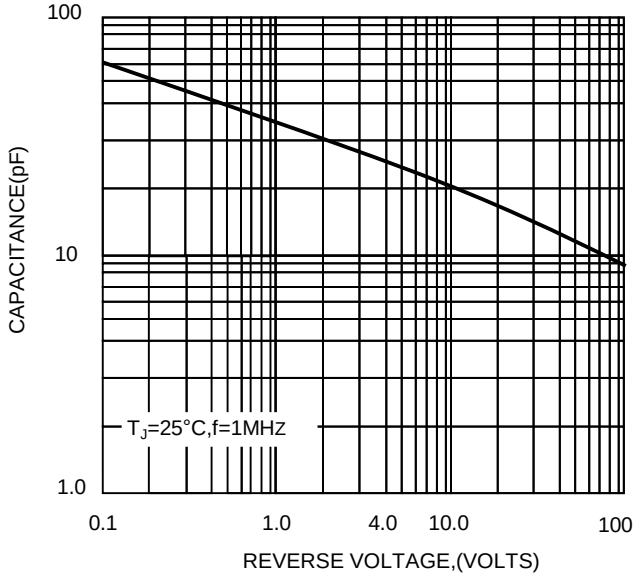


FIG.4-TYPICAL FORWARD CHARACTERISTICS

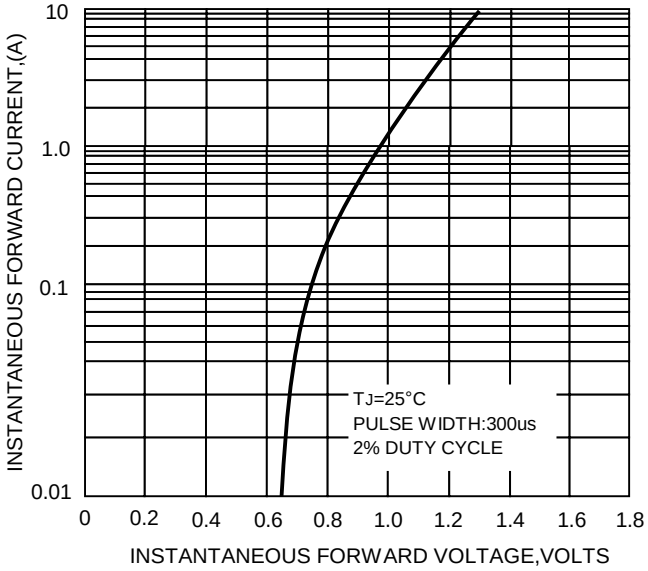


FIG.5-TYPICAL REVERSE CHARACTERISTICS