

DF005L THRU DF10L

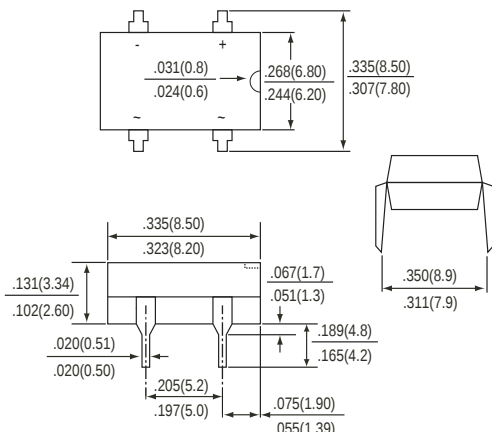
SINTERED GLASS PASSIVATED BRIDGE RECTIFIER

Reverse Voltage - 50 to 1000 Volts

Forward Current - 1.0 Ampere

PATENTED

DFML



*Dimensions in inches and (millimeters)

SuperBridge with GPRC inside

SUPEREX II™



FEATURES

- * Internal Constructure with GPRC (Glass Passivated Rectifier Chip) inside
- * Diffused Junction
- * Low Forward Voltage Drop, High Current Capability
- * High Surge Current Capability
- * Designed for Surface Mount Application
- * Plastic Material-UL Recognition Flammability Classification 94V-0

MECHANICAL DATA

Case : Molded Plastic
Terminals : Plated Leads, solderable per MIL-STD-750, Method 2026
Polarity : As marked on Case
Weight : 0.38 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.	SYMBOLS	DF005L	DF01L	DF02L	DF04L	DF06L	DF08L	DF10L	UNITS
Maximum repetitive 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 @ T _A =40°C	I _{AV}	1.0							Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	50							Amps
Maximum instantaneous forward voltage @ I _F =1.0 A	V _F	1.1							Volts
Maximum DC reverse current @ T _C =25°C at rated DC blocking voltage @ T _C =125°C	I _R	5 500							uA
I ² t rating for fusing (t < 8.3ms)	I ² t	10.4							A ² s
Typical junction capacitance per element (NOTE 1)	C _J	25							pF
Typical thermal resistance, junction to ambient (NOTE 2)	R θJA	40							°C / W
Operating junction and storage temperature range	T _J ,T _{STG}	-55 to +175							°C

NOTES : (1) Measured at 1.0 MHz and applied reverse voltage of 4.0 V DC.

(2) Thermal resistance from junction to ambient mounted on P.C.B. with 0.5 x 0.5" (13 x 13mm) copper pads.

RATINGS AND CHARACTERISTIC CURVES DF005L THRU DF10L

FIG.1 - FORWARD CURRENT DERATING CURVE

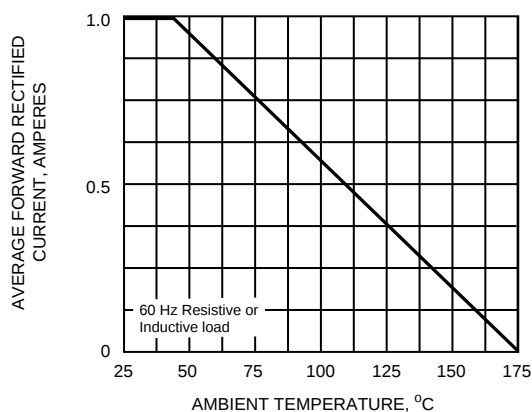


FIG.2 - MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

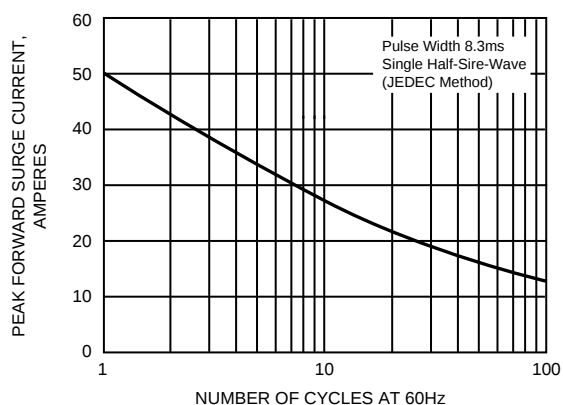


FIG.3 - TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

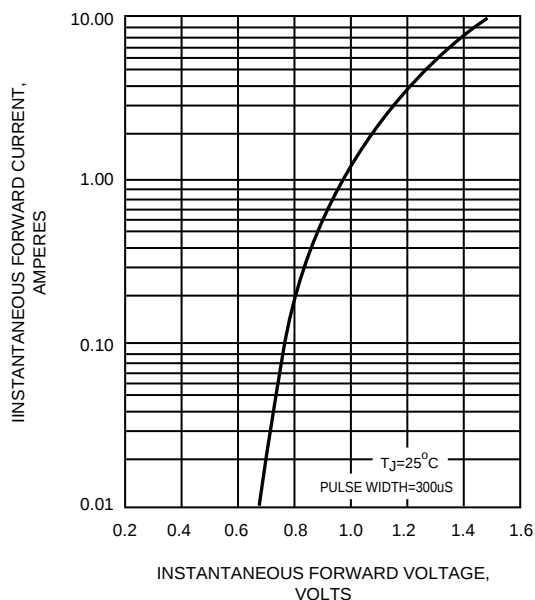


FIG.4 - TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

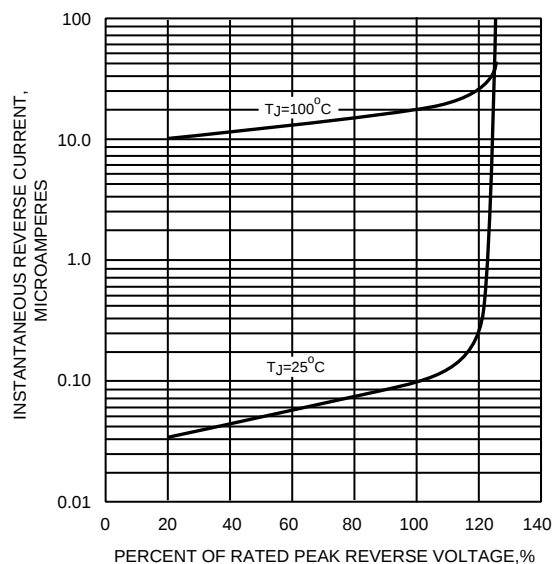


FIG.5 - TYPICAL JUNCTION CAPACITANCE

