DF005M THRU DF10M

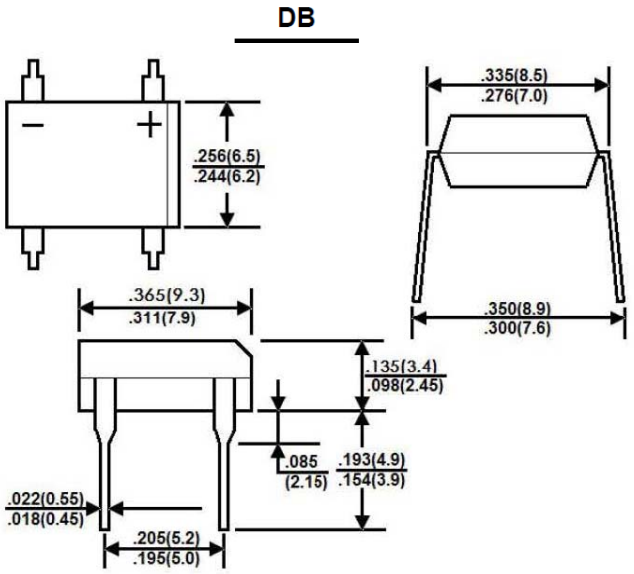
MINIATURE GLASS PASSIVATED SINGLE-PHASE-BRIDGE RECTIFIERS

Features

- Plastic package used has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junctions
- Surge overload rating of 50 Amperes peak
- Ideal for printed circuit boards
- High temperature soldering guaranteed: 260 °C/10 seconds at 5 lbs. (2.3Kg) tension

Mechanical Darta

- Case: Molded plastic body over passivated junctions
- Terminals: Plated lead solderable per MIL-STD-750, Method 2026
- Polarity: Polarity symbols marked on body
- Mounting Position: Any



Dimensions in inches and (millimeters)

Absolute Maximum Ratings and Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbols	DF 005M	DF 01M	DF 02M	DF 04M	DF 06M	DF 08M	DF 10M	Unit
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Output Rectified Current at T_A = 40 °C [2]	$I_{F(AV)}$	1							A
Peak Forward Surge Current Single Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	50							A
Maximum Forward Voltage Drop Per Leg at 1 A	V_F	1.1							V
Maximum Reverse Current T_A = 25 °C at Rated DC Blocking Voltage Per Leg T_A = 125 °C	I_R	5 500							μA
Rating for Fusing (t < 8.35 ms)	I^2t	10							A^2sec
Typical Junction Capacitance Per Leg [1]	C_J	25							pF
Typical Thermal Resistance Per Leg [2]	$R_{\theta JA}$ $R_{\theta JL}$	40 15							°C/W
Operating junction and storage temperature range	T_J ,T_{Stg}	-55 to +150							°C

[1] Measured at $1MH_Z$ and applied reverse voltage of 4 Volts

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

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FIG.1-DERATING CURVE OUTPUT RECTIFIED CURRENT

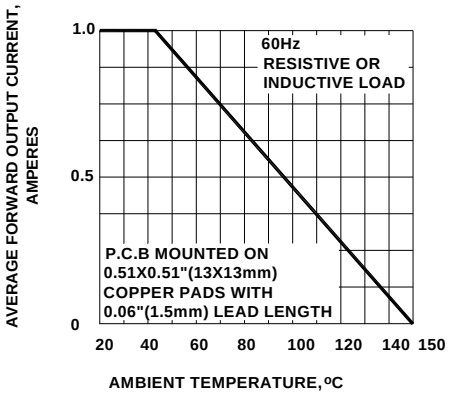

FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER LEG

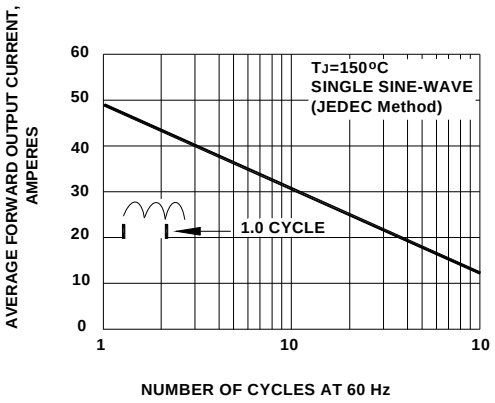

FIG.3-TYPICAL FORWARD CHARACTERISTICS PER LEG

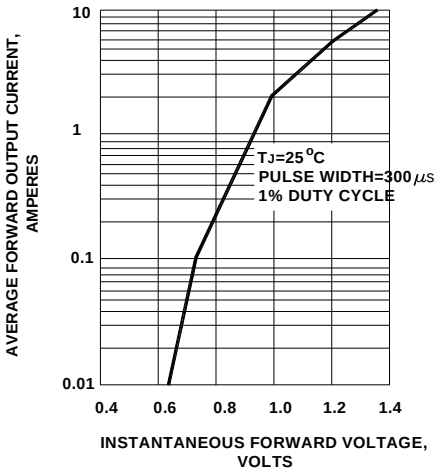

FIG.4-TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

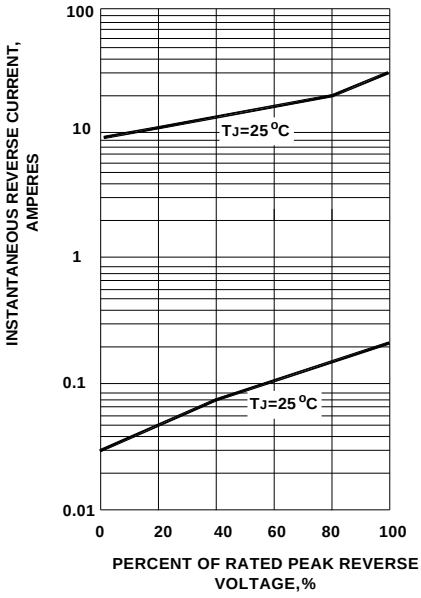

FIG.5-TYPICAL JUNCTION CAPACITANCE PER LEG

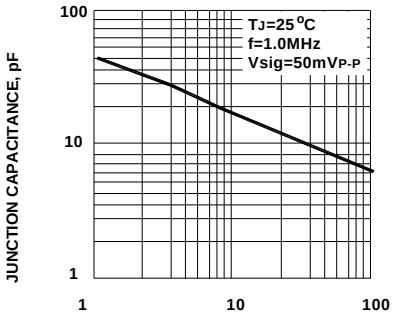

FIG.6-TYPICAL TRANSIENT THERMAL IMPEDANCE