DF005M THRU DF10M

MINIATURE GLASS PASSIVATED SINGLE-PHASE-BRIDGE RECTIFIER

Reverse Voltage - 50 to 1000 Volts Forward Current - 1.0 Ampere

Case Style DFM

0.338 (8.51) 0.326 (8.2) 0.285 (7.24) 0.130 (3.3) 0.120 (3.05) 0.120 (3.05) 0.023 (0.58) 0.023 (0.58) 0.013 (3.3) 0.025 (1.27) 0.080 (2.03) 0.050 (1.27) 0.080 (2.03) 0.080 (3.03) 0.080

Dimensions in inches and (millimeters)

FEATURES

- ◆ This series is UL listed under the Recognized Component Index, file number E54214
- 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 DATA

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 Weight: 0.04 ounce, 1.0 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOLS	DF 005M	DF 01M	DF 02M	DF 04M	DF 06M	DF 08M	DF 10M	UNITS
Maximum repetitive peak reverse voltage	VRRM	50	100	200	400	600	800	1000	Volts
Maximum RMS voltage	VRMS	35	70	140	280	420	560	700	Volts
Maximum DC blocking voltage	VDC	50	100	200	400	600	800	1000	Volts
Maximum average forward output rectified current at T _A =40°C	I(AV)	1.0							Amp
Peak forward surge current single sine-wave superimposed on rated load (JEDEC Method)	IFSM	50.0							Amps
Rating for fusing (t < 8.3ms)	l²t	10.0							A²sec
Maximum instantaneous forward voltage drop per leg at 1.0A	VF	1.1							Volts
Maximum reverse current TA=25°C at rated DC blocking voltage per leg TA=125°C	lR	5.0 500.0							μΑ
Typical junction capacitance per leg (NOTE 1)	СJ	25.0							pF
Typical thermal resistance per leg (NOTE 2)	R _O JA R _O JL	40.0 15.0							°C/W
Operating junction and storage temperature range	TJ, TSTG	-55 to +150					°C		

NOTES:

(1) Measured at 1.0 MHz and applied reverse voltage of 4.0 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 13mm) copper pads



RATINGS AND CHARACTERISTICS CURVES DF005M THRU DF10M

FIG. 1 - DERATING CURVE OUTPUT RECTIFIED CURRENT

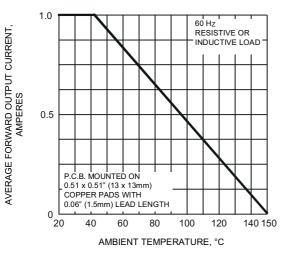


FIG. 3 - TYPICAL FORWARD CHARACTERISTICS PER LEG

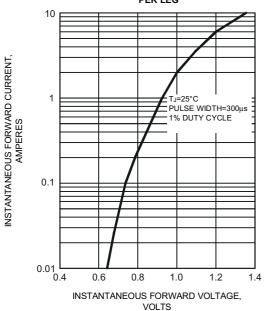


FIG. 5 - TYPICAL JUNCTION CAPACITANCE PER LEG

100

TJ=25°C

f=1.0 MHz
Vsig=50mVp-p
10

REVERSE VOLTAGE, VOLTS

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

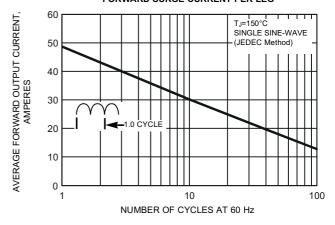


FIG. 4 - TYPICAL REVERSE LEAKAGE CHARACTERISTICS PER LEG

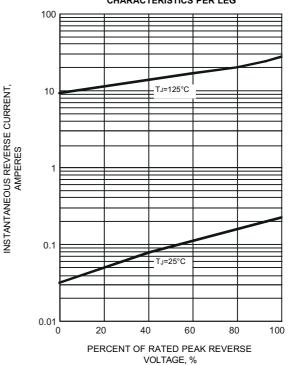


FIG. 6 - TYPICAL TRANSIENT THERMAL

