



## SINGLE PHASE GLASS PASSIVATED BRIDGE RECTIFIER

DF15005M THRU DF1510M

VOLTAGE RANGE  
CURRENT

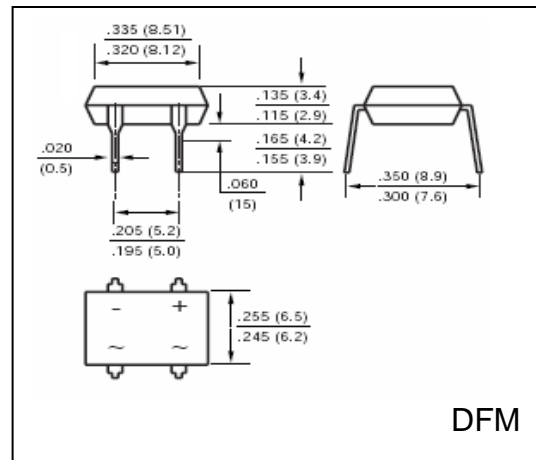
50 to 1000 Volts  
1.5 Ampere

### FEATURES

- high forward surge current capability
- Glass passivated chip junction
- High case dielectric strength
- High temperature soldering guaranteed:  
260°C / 10 seconds

### MECHANICAL DATA

- Case: Transfer molded plastic
- Terminal: Lead solderable per MIL-STD-750 method 2026
- Polarity: Polarity symbols marked on case
- Mounting: any
- Weight: 0.04 ounce, 1.0 gram



### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

- Ratings at 25°C ambient temperature unless otherwise specified
- Single Phase, half wave, 60Hz, resistive or inductive load
- For capacitive load derate current by 20%

	SYMBOLS	DF 15005M	DF 1501M	DF 1502M	DF 1504M	DF 1506M	DF 1508M	DF 1510M	UNIT
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, 0.06" (1.5mm) lead length at $T_A = 40^\circ\text{C}$ (Note 1)	$I_{(AV)}$	1.5							Amps
Peak Forward Surge Current 8.3mS single half sine wave superimposed on rated load (JEDEC method)	$I_{FSM}$	50							Amps
Rating for Fusing ( $t < 8.3\text{mS}$ )	$I^2t$	10							$\text{A}^2\text{s}$
Maximum Instantaneous Forward Voltage drop per Bridge element 1.5A	$V_F$	1.1							Volts
Maximum DC Reverse Current at Rated $T_A = 25^\circ\text{C}$	$I_R$	10							$\mu\text{A}$
DC Blocking Voltage per element $T_A = 125^\circ\text{C}$		0.5							mA
Typical Junction Capacitance (Measured at 1.0MHz and applied reverse voltage of 4.0V)	$C_J$	25							pF
Typical Thermal Resistance (Note 1)	$R_{\theta JC}$	40							$^\circ\text{C}/\text{W}$
Operating Junction Temperature Range	$T_J$	(-55 to +150)							$^\circ\text{C}$
Storage Temperature Range	$T_{STG}$	(-55 to +150)							$^\circ\text{C}$

### Notes:

1. Unit mounted on PCB with 0.51" X 0.51" (13mm X 13mm) copper pads



RATINGS AND CHARACTERISTIC CURVES DF15005M THRU DF1510M

FIG.1-DERATING CURVE FOR OUTPUT RECTIFIED CURRENT

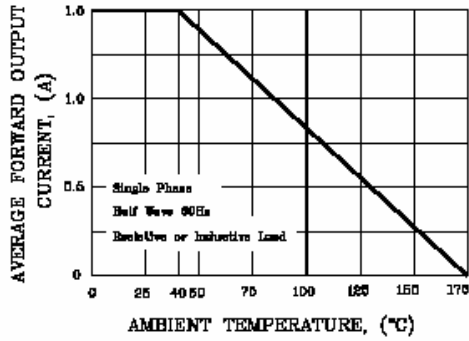


FIG.2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT PER ELEMENT

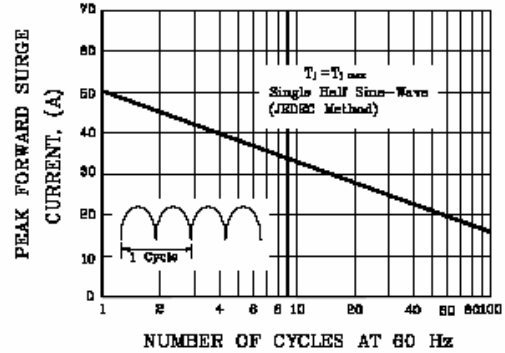


FIG.3-TYPICAL FORWARD CHARACTERISTICS PER BRIDGE ELEMENT

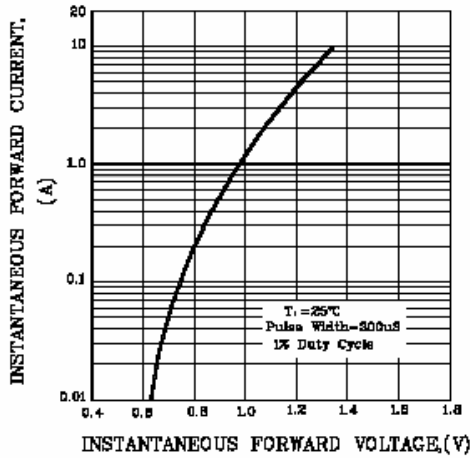


FIG.4-TYPICAL REVERSE CHARACTERISTICS PER BRIDGE ELEMENT

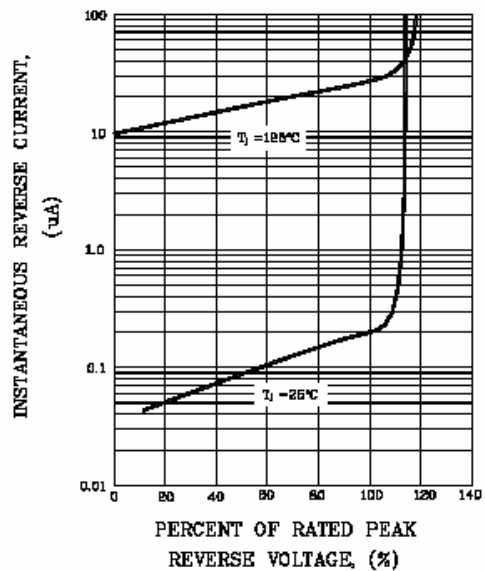


FIG.5-TYPICAL JUNCTION CAPACITANCE PER BRIDGE ELEMENT

