## DF2005S THRU DF210S

## GLASS PASSIVATED BRIDGE RECTIFIERS

## FEATURES

- Plastic package used has Underwriters Laboratory Flammability Classification 94V-0
- Glass passivated chip junction
- High surge overload rating of 50 Amperes peak
- High temperature soldering guaranteed: $260^{\circ} \mathrm{C} / 10$ seconds, at $5 \mathrm{lbs} .(2.3 \mathrm{~kg})$ tension


## MECHANICAL DATA

- Case: Molded plastic body over passivated junctions
- Terminals: Plated leads solderable per MIL-STD-750 Method 2026
- Mounting Position: Any
- Weight: 0.014 oz., 0.4 g




## MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at $25^{\circ} \mathrm{C}$ ambient temperature unless otherwise specified.
Single phase half-wave 60 Hz , resistive or inductive load,for capacitive load current derate by $20 \%$.

| CHARACTERISTICS |  | SYMBOL | DF2005S | DF201S | DF202S | DF204S | DF206S | DF208S | DF210S | UNITS |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Maximum Recurrent Peak Reverse Voltage |  | VRrm | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum RMS Bridge Input Voltage |  | Vrms | 35 | 70 | 140 | 280 | 420 | 560 | 700 | V |
| Maximum DC Blocking Voltage |  | VDC | 50 | 100 | 200 | 400 | 600 | 800 | 1000 | V |
| Maximum Average Forward Output Current at $\mathrm{TA}=40^{\circ} \mathrm{C}$ |  | 10 | 2.0 |  |  |  |  |  |  | A |
| Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC Method) |  | IFSM | 60 |  |  |  |  |  |  | A |
| Maximum DC Forward Voltage Drop per Bridge Element at 2.0A DC |  | VF | 1.1 |  |  |  |  |  |  | V |
| Maximum Reverse Current at rated DC Blocking Voltage per element | $@ T_{A}=25^{\circ} \mathrm{C}$ | IR | 10.0 |  |  |  |  |  |  | $\mu \mathrm{A}$ |
|  | $@ T_{A}=125^{\circ} \mathrm{C}$ |  | 500 |  |  |  |  |  |  |  |
| $\mathrm{I}^{2} \mathrm{t}$ Rating for Fusing ( $\mathrm{t}<8.3 \mathrm{~ms}$ ) |  | $1^{2} \mathrm{t}$ | 10.4 |  |  |  |  |  |  | $A^{2} \mathrm{Sec}$ |
| Typical Junction Capacitance ( Note1) |  | CJ | 25 |  |  |  |  |  |  | pF |
| Typical Thermal Resistance (Note 2) |  | R $\mathrm{JJA}^{\text {A }}$ | 40 |  |  |  |  |  |  | ${ }^{0} \mathrm{C} / \mathrm{W}$ |
| Operating and Storage Temperature Range |  | TJ,Tstg | -55 to +150 |  |  |  |  |  |  | ${ }^{\circ} \mathrm{C}$ |

NOTES: 1.Measured at 1 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 $0.5 \times 0.5^{\prime \prime}(13 \times 13 \mathrm{~mm})$ copper pads.

## (111) <br> DF2005S THRU DF210S RATINGS AND CHARACTERISTIC CURVES



FIG.5-TYPICAL REVERSE CHARACTERISTICS


