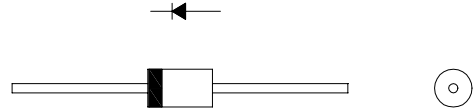


FRD Type: 31DF4

FEATURES

- * Ultra – Fast Recovery
- * Low Forward Voltage Drop
- * Low Power Loss, High Efficiency
- * High Surge Capability
- * 200 Volts thru 600 Volts Types Available

OUTLINE DRAWING



Maximum Ratings

Apporox Net Weight:1.19g

| Rating | Symbol | 31DF4 | | | Unit |
|-------------------------------------|--------------|---------------|---|------------------------------------|-------------|
| Repetitive Peak Reverse Voltage | V_{RRM} | 400 | | | V |
| Non-repetitive Peak Reverse Voltage | V_{RSM} | 440 | | | V |
| Average Rectified Output Current | I_o | 1.5 | $T_a=29^{\circ}C$ *1 | 50Hz Half Sine Wave Resistive Load | A |
| | | 3.0 | $T_a=25^{\circ}C$ *2 | | |
| RMS Forward Current | $I_{F(RMS)}$ | 4.71 | | | A |
| Surge Forward Current | I_{FSM} | 60 | 50Hz Half Sine Wave, 1cycle, Non-repetitive | | A |
| Operating JunctionTemperature Range | T_{jw} | - 40 to + 150 | | | $^{\circ}C$ |
| Storage Temperature Range | T_{stg} | - 40 to + 150 | | | $^{\circ}C$ |

Electrical/Thermal • Characteristics

| Characteristics | Symbol | Conditions | Min. | Typ. | Max. | Unit |
|--|---------------|--|------|------|------|---------------|
| Peak Reverse Current | I_{RM} | $T_j = 25^{\circ}C, V_{RM} = V_{RRM}$ | - | - | 20 | μA |
| Peak Forward Voltage | V_{FM} | $T_j = 25^{\circ}C, I_{FM} = 3 A$ | - | - | 1.25 | V |
| Reverse Recovery Time | t_{rr} | $T_a = 25^{\circ}C, I_{FM} = 3 A -di/dt = 50A/\mu s$ | | | 30 | ns |
| Thermal Resistance (Junction to Ambient) | $R_{th(j-a)}$ | *1:Without Fin. | - | - | 80 | $^{\circ}C/W$ |
| | | *2:With Fin | | | 34 | |

*1: Without Fin or P.C. Board

*2: With Fin:20x20x1t(mm):Copper plates, L=5mm, Both Sides

31DF4 OUTLINE DRAWING (Dimensions in mm)

