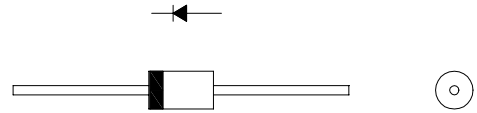


FRD Type: 31DF4

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	Ta=29°C *1	50Hz Half Sine Wave Resistive Load	A
		3.0	Ta=25°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			°C
Storage Temperature Range	T_{stg}	- 40 to + 150			°C

Electrical/Thermal • Characteristics

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

