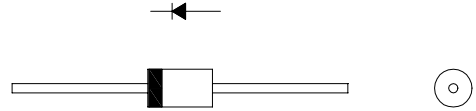


FRD Type: 31DF2

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	31DF2			Unit
Repetitive Peak Reverse Voltage	V_{RRM}	200			V
Non-repetitive Peak Reverse Voltage	V_{RSM}	220			V
Average Rectified Output Current	I_o	1.6	$T_a=40^{\circ}C$ *1	50Hz Half Sine Wave Resistive Load	A
		3.0	$T_a=40^{\circ}C$ *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			$^{\circ}C$

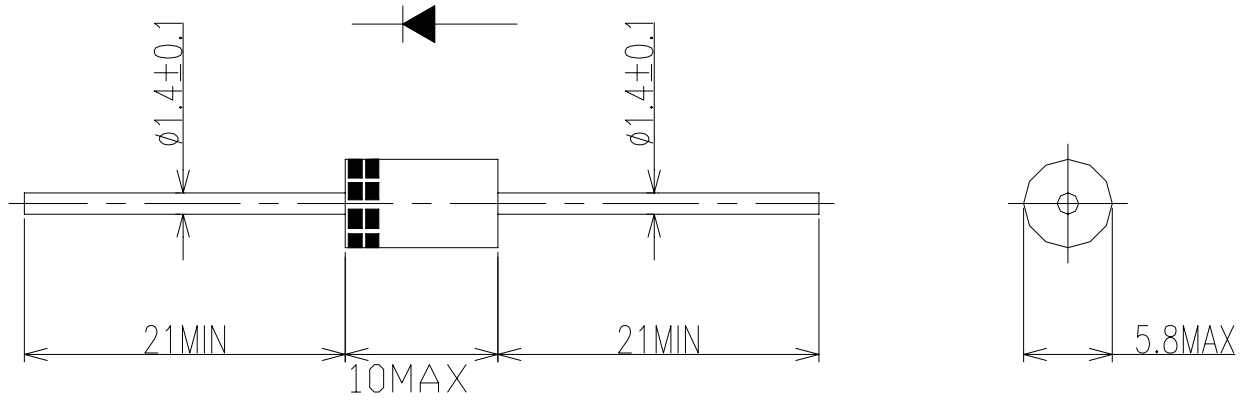
Electrical/Thermal • Characteristics

Characteristics	Symbol	Conditions	Min.	Typ.	Max.	Unit
Peak Reverse Current	I_{RM}	$T_j = 25^{\circ}C, V_{RM} = V_{RRM}$	-	-	10	μA
Peak Forward Voltage	V_{FM}	$T_j = 25^{\circ}C, I_{FM} = 3 A$	-	-	0.98	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	

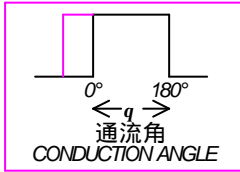
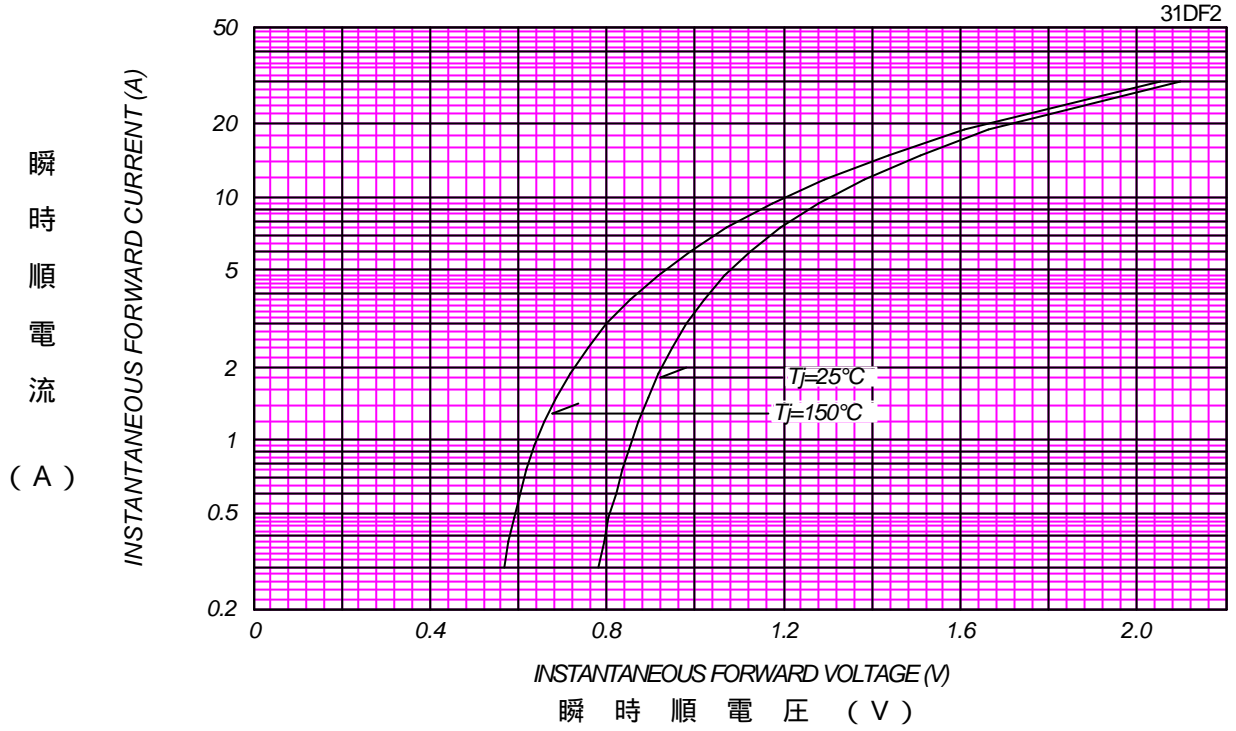
*1: Without Fin or P.C. Board

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

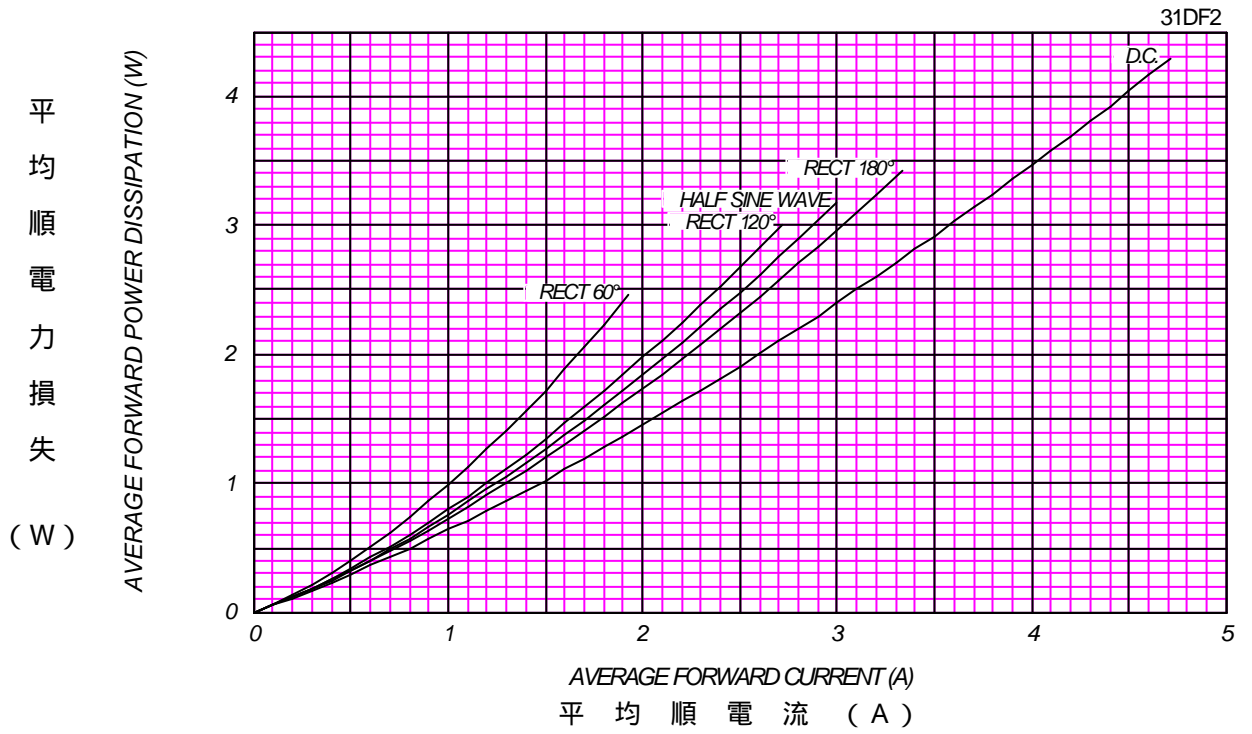
31DF_ OUTLINE DRAWING (Dimensions in mm)

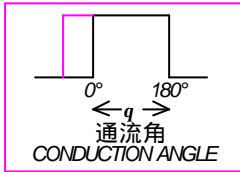


順電压特性
FORWARD CURRENT VS. VOLTAGE



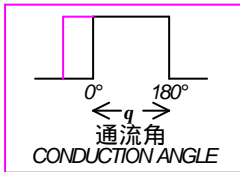
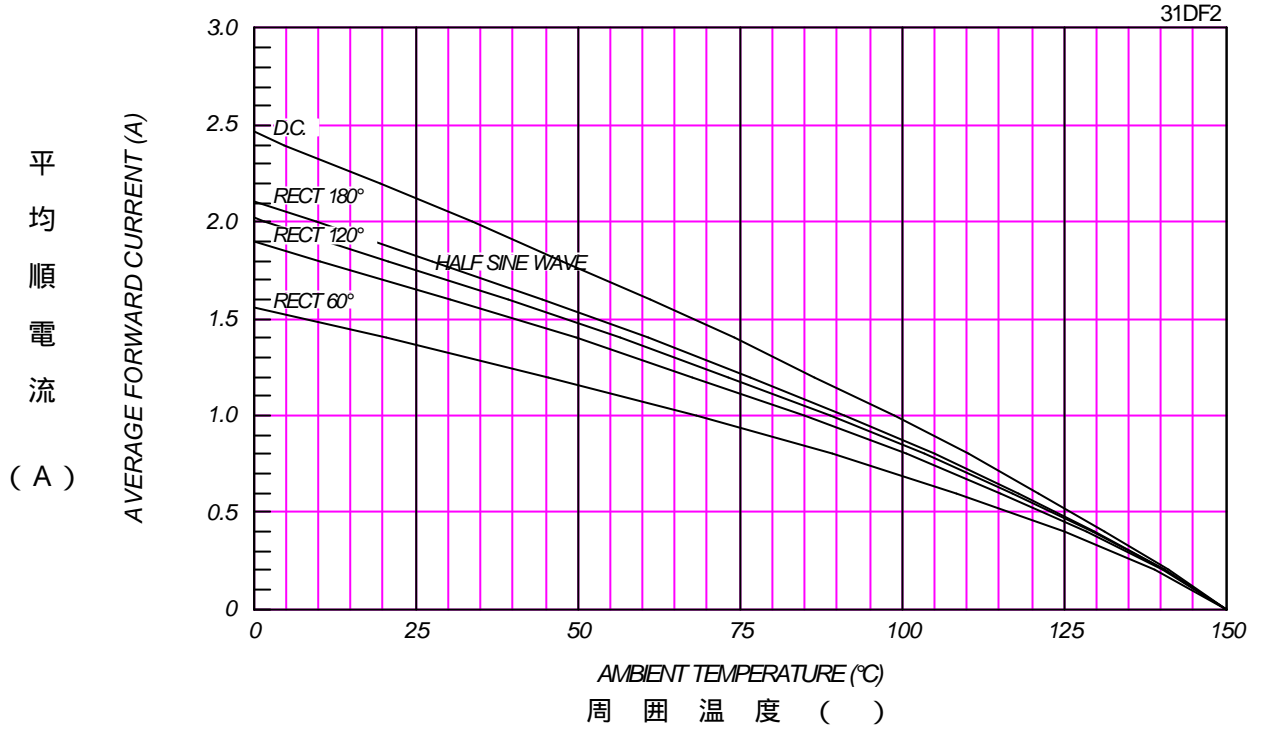
平均順電力損失特性
AVERAGE FORWARD POWER DISSIPATION





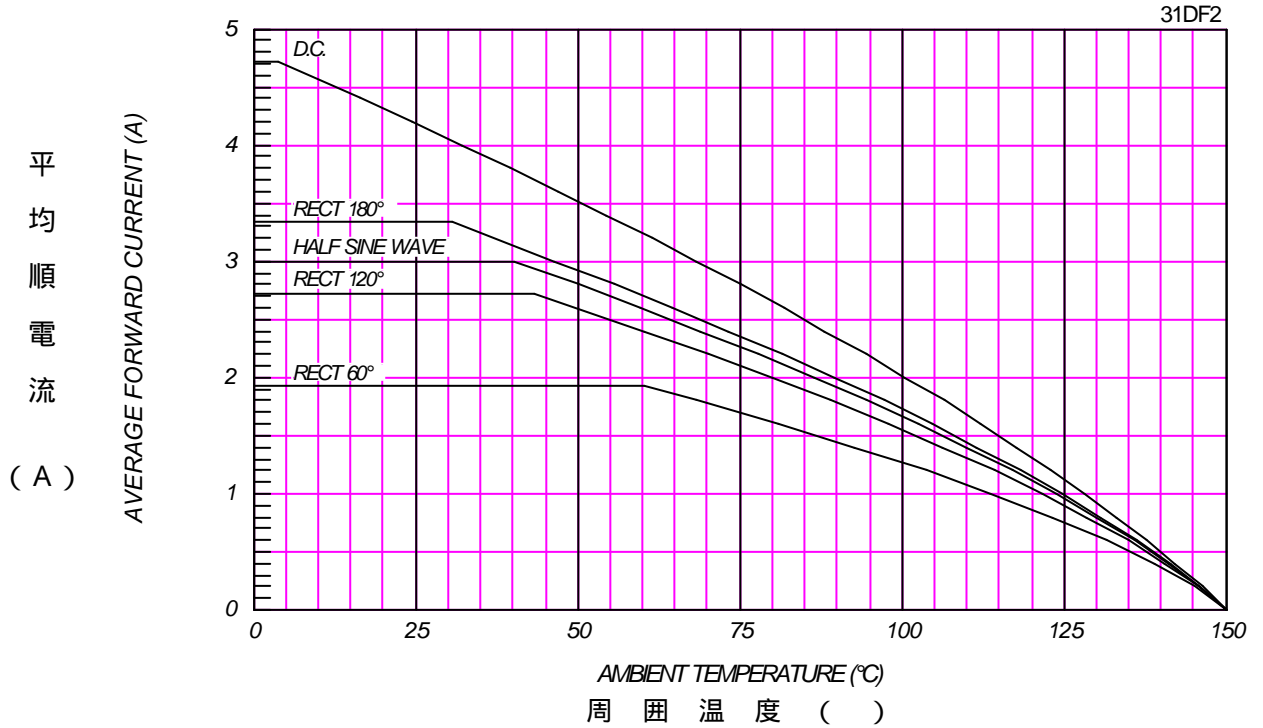
平均順電流 - 周圍溫度定格
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

Without Fin or P.C. Board



平均順電流 - 周圍溫度定格
AVERAGE FORWARD CURRENT VS. AMBIENT TEMPERATURE

With Cu Fin (20x20x1t, L=5mm, Both sides)



サージ順電流定格
SURGE CURRENT RATINGS

f=50Hz, Half Sine Wave, Non-Repetitive, No Load

31DF2

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流

(A)

