

# FRD MODULE 30A/400V

# P2H30F4

## FEATURES

- \* Compatible with Isolated Base SOT227
- \* Dual Separated Diodes
- \* Ultra – Fast Recovery
- \* Low Forward Voltage Drop
- \* High Surge Capability

## OUTLINE DRAWING

See the Next Page

## TYPICAL APPLICATIONS

- \* High Frequency Rectification

## Maximum Ratings

Approx Net Weight:35g

Parameter	Symbol	Type / Grade		Unit
		P2H30F4	-	
Repetitive Peak Reverse Voltage *1	$V_{RRM}$	400	-	V
Non Repetitive Peak Reverse Voltage *1	$V_{RSM}$	-	-	

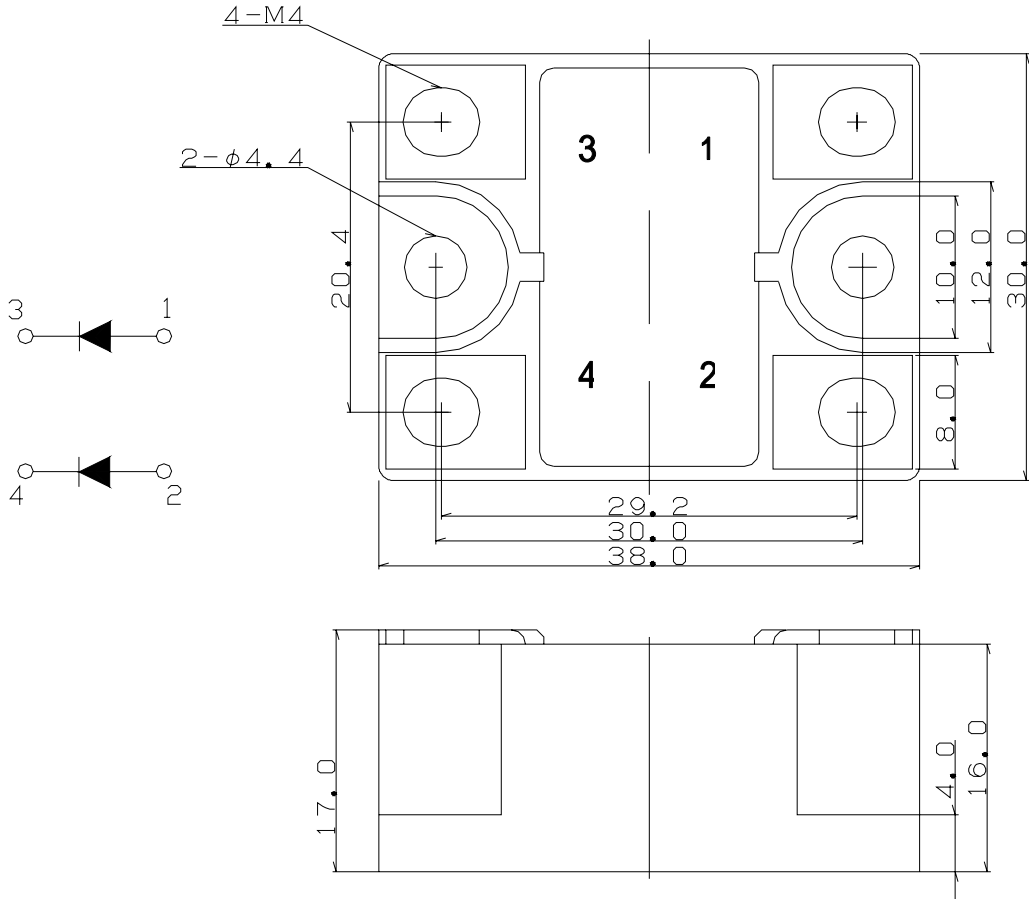
Parameter		Conditions	Max Rated Value	Unit
Average Rectified Output Current *1	$I_{O(AV)}$	50Hz Half Sine Wave condition $T_c=75^\circ\text{C}$	30	A
RMS Forward Current *1	$I_{F(RMS)}$		47	A
Surge Forward Current *1	$I_{FSM}$	50 Hz Half Sine Wave,1Pulse Non-repetitive	300	A
I Squared t *1	$I^2t$	2msec to 10msec	450	$\text{A}^2\text{s}$
Operating JunctionTemperature Range	$T_{jw}$		-40 to +150	$^\circ\text{C}$
Storage Temperature Range	$T_{stg}$		-40 to +125	$^\circ\text{C}$
Isoration Voltage	Viso	Base Plate to Terminals, AC1min	2500	V
Mounting torque	Case mounting	Ftor	M4Screw	N.m
	Terminals		M4Screw	

## Electrical • Thermal Characteristics

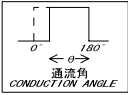
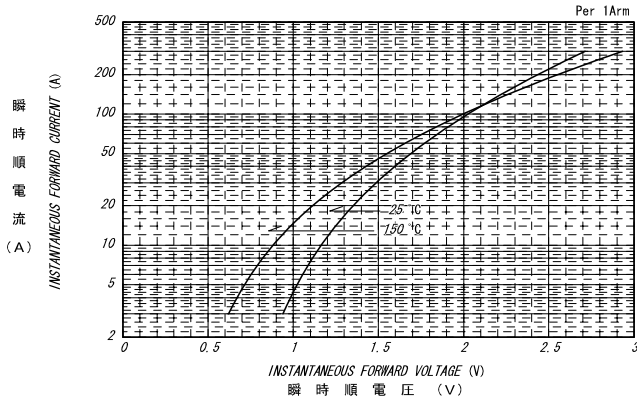
Characteristics	Symbol	Test Conditions	Max.	Unit
Peak Reverse Current *1	$I_{RM}$	$V_{RM}= V_{RRM}, T_j= 25^\circ\text{C}$	50	$\mu\text{A}$
Peak Forward Voltage *1	$V_{FM}$	$I_{FM}= 30\text{A}, T_j=25^\circ\text{C}$	1.33	V
Reverse Recovery Time	trr	$T_j=25^\circ\text{C}, I_{FM}=10\text{A}, -di/dt=50\text{A}/\mu\text{s}$	60	ns
Thermal Resistance *1	Rth(j-c)	Junction to Case	1.53	$^\circ\text{C}/\text{W}$
	Rth(c-f)	Base Plate to Heat Sink with Thermal Compound	0.3	

\*1: Value Per 1Arm

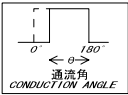
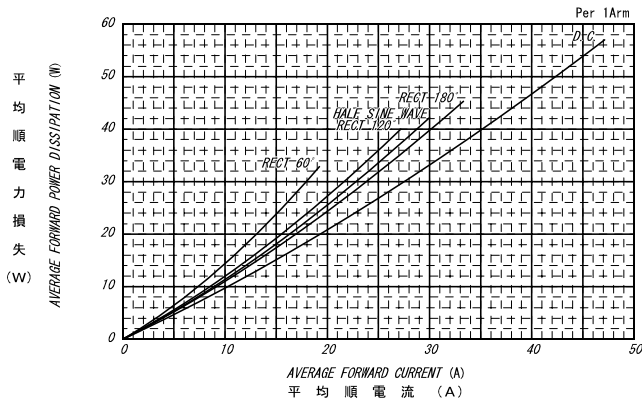
P2H30F4 OUTLINE DRAWING (Dimensions in mm)



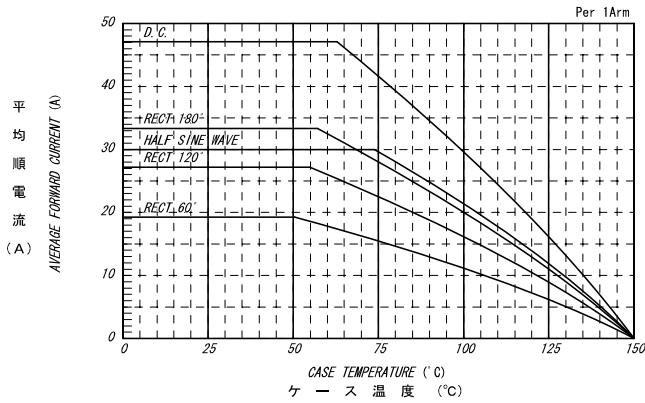
順電圧特性  
FORWARD CURRENT VS. VOLTAGE



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

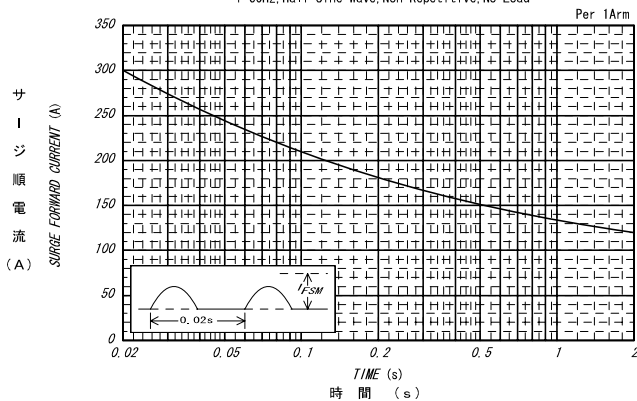


平均順電流 - ケース温度定格  
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



サージ順電流定格  
SURGE CURRENT RATINGS

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



過渡熱抵抗特性  
MAXIMUM TRANSIENT THERMAL IMPEDANCE  
Junction to Case

