

FRD MODULE 80A/400V

P2H80F4

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
		P2H80F4	-	
Repetitive Peak Reverse Voltage *1	V _{RRM}	400	-	V
Non Repetitive Peak Reverse Voltage *1	V _{RSM}	-	-	

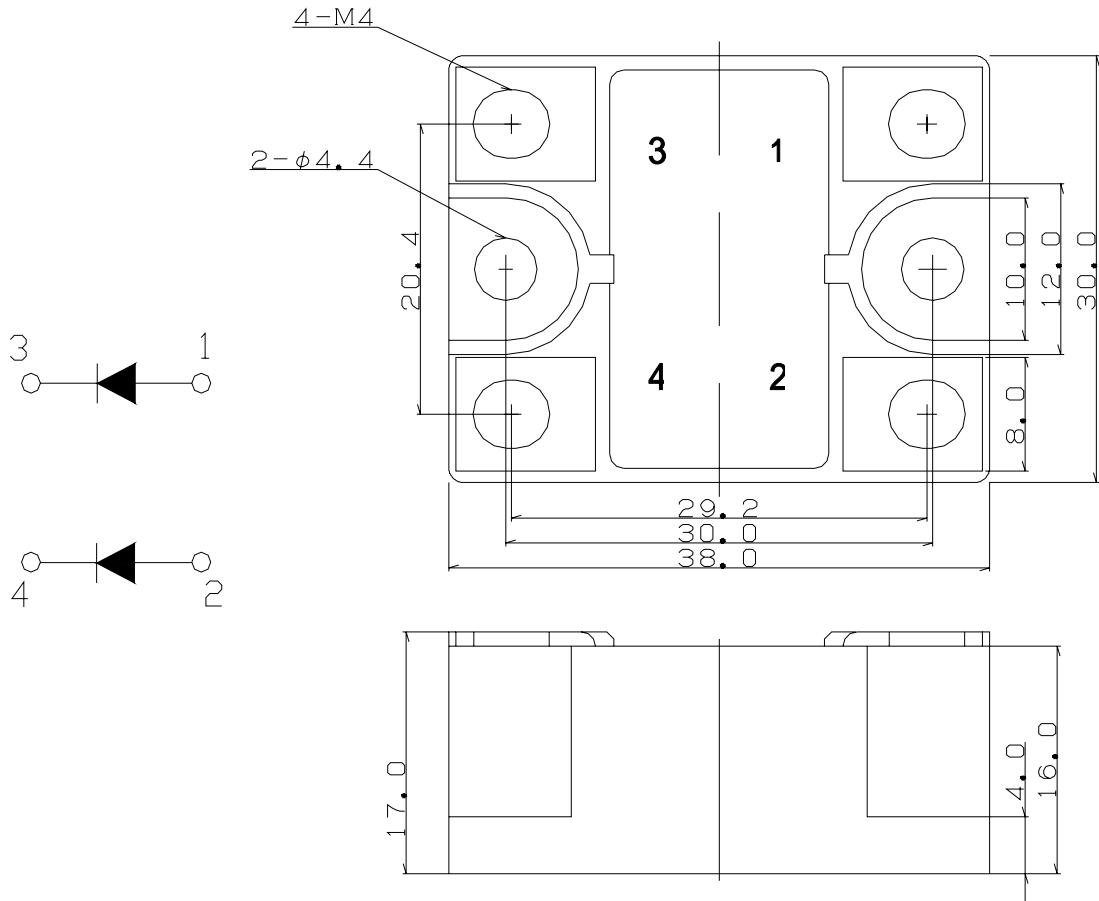
Parameter		Conditions	Max Rated Value	Unit	
Average Rectified Output Current *1	I _{O(AV)}	50Hz Half Sine Wave condition T _c =85°C	80	A	
RMS Forward Current *1	I _{F(RMS)}		125	A	
Surge Forward Current *1	I _{FSM}	50 Hz Half Sine Wave,1Pulse Non-repetitive	800	A	
I Squared t *1	I ² t	2msec to 10msec	3200	A ² s	
Operating JunctionTemperature Range	T _{jw}		-40 to +150	°C	
Storage Temperature Range	T _{stg}		-40 to +125	°C	
Isoration Voltage	Viso	Base Plate to Terminals, AC1min	2500	V	
Mounting torque	Case mounting	F _{tor}	M4Screw	1.5(1.4)	N.m
	Terminals		M4Screw	1.5(1.4)	

Electrical • Thermal Characteristics

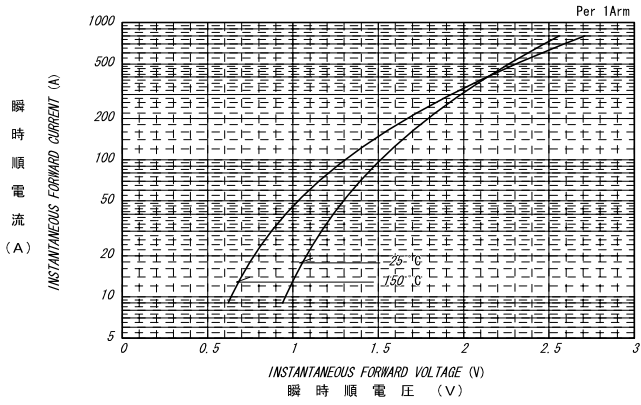
Characteristics	Symbol	Test Conditions	Max.	Unit
Peak Reverse Current *1	I _{RM}	V _{RM} = V _{RRM} , T _j = 25°C	150	μA
Peak Forward Voltage *1	V _{FM}	I _{FM} = 80A, T _j =25°C	1.31	V
Reverse Recovery Time	trr	T _j =25°C , I _{FM} =10A, -di/dt=50A/μs	60	ns
Thermal Resistance *1	R _{th(j-c)}	Junction to Case	0.51	°C/W
	R _{th(c-f)}	Base Plate to Heat Sink with Thermal Compound	0.3	

*1: Value Per 1Arm

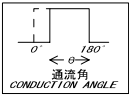
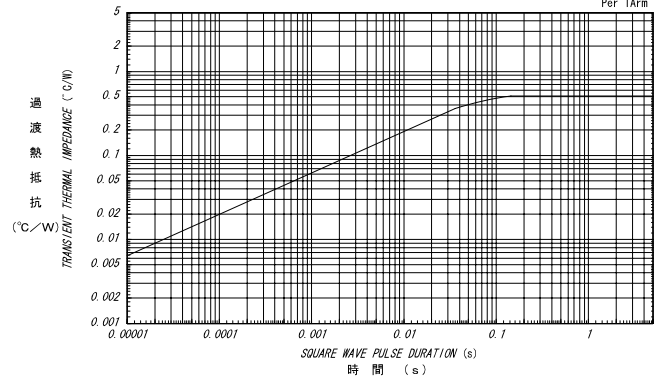
P2H80F4 OUTLINE DRAWING (Dimensions in mm)



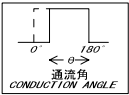
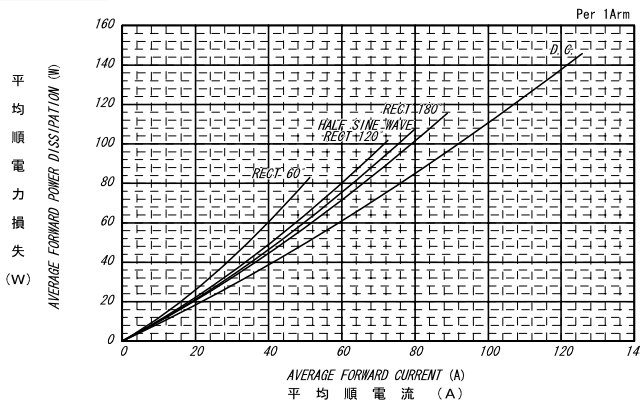
順電圧特性
FORWARD CURRENT VS. VOLTAGE



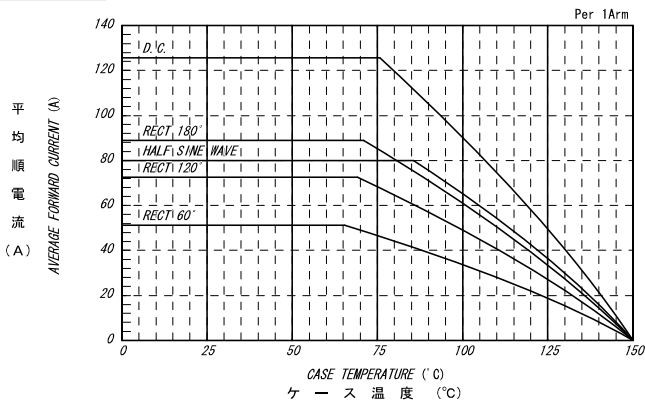
過渡熱抵抗特性
MAXIMUM TRANSIENT THERMAL IMPEDANCE
Junction to Case



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

