

FRD MODULE 80A/200V

P2H80F2

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
		P2H80F2	-	
Repetitive Peak Reverse Voltage *1	V_{RRM}	200	-	V
Non Repetitive Peak Reverse Voltage *1	V_{RSM}	-	-	

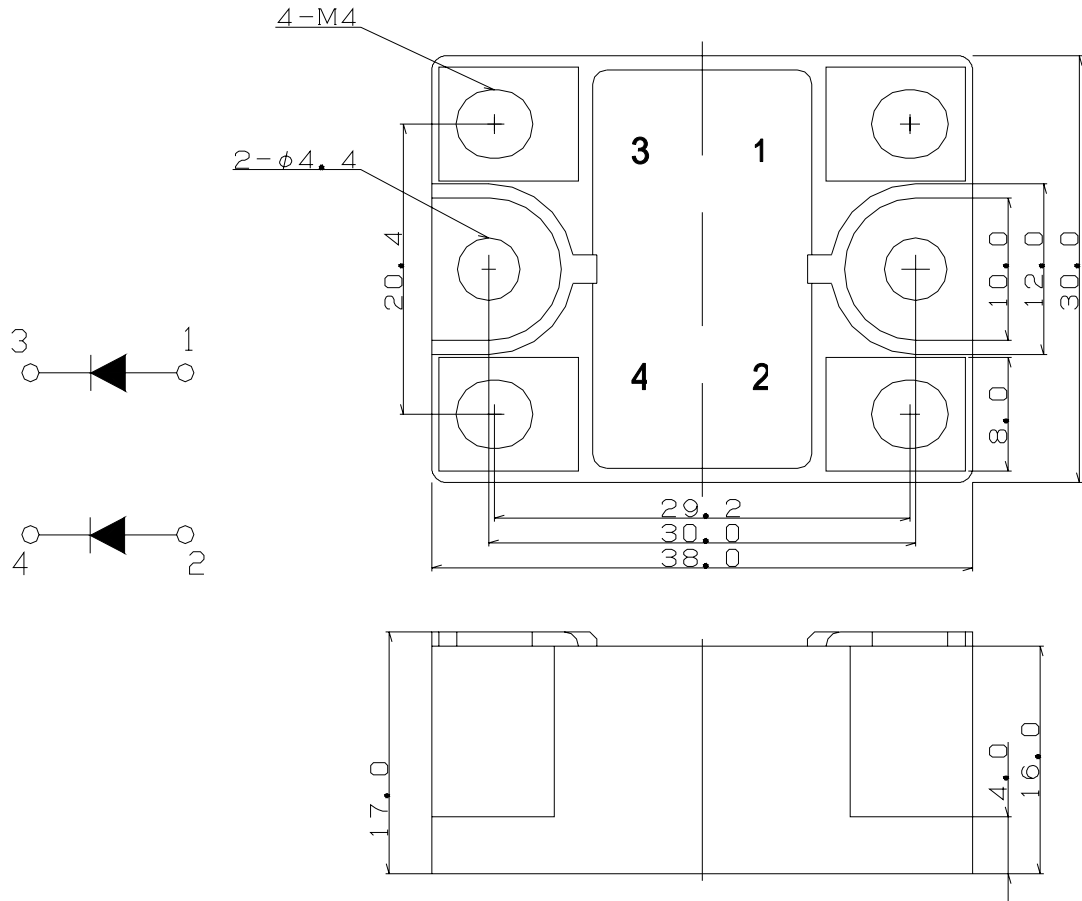
Parameter		Conditions	Max Rated Value	Unit	
Average Rectified Output Current *1	$I_{O(AV)}$	50Hz Half Sine Wave condition $T_c=96^{\circ}C$	80	A	
RMS Forward Current *1	$I_{F(RMS)}$		125	A	
Surge Forward Current *1	I_{FSM}	50 Hz Half Sine Wave,1Pulse Non-repetitive	800	A	
I Squared t *1	I^2t	2msec to 10msec	3200	A^2s	
Operating JunctionTemperature Range	T_{jw}		-40 to +150	$^{\circ}C$	
Storage Temperature Range	T_{stg}		-40 to +125	$^{\circ}C$	
Isolation Voltage	Viso	Base Plate to Terminals, AC1min	2500	V	
Mounting torque	Case mounting	Ftor	M4Screw	1.5(1.4)	N.m
	Terminals		M4Screw	1.5(1.4)	

Electrical • Thermal Characteristics

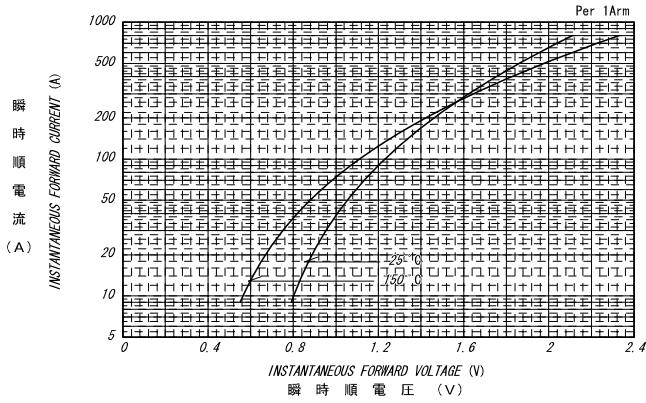
Characteristics	Symbol	Test Conditions	Max.	Unit
Peak Reverse Current *1	I_{RM}	$V_{RM}= V_{RRM}, T_j= 25^{\circ}C$	75	μA
Peak Forward Voltage *1	V_{FM}	$I_{FM}= 80A, T_j=25^{\circ}C$	1.05	V
Reverse Recovery Time	trr	$T_j=25^{\circ}C, I_{FM}=10A, -di/dt=50A/\mu s$	50	ns
Thermal Resistance *1	Rth(j-c)	Junction to Case	0.51	$^{\circ}C/W$
	Rth(c-f)	Base Plate to Heat Sink with Thermal Compound	0.3	

*1: Value Per 1Arm

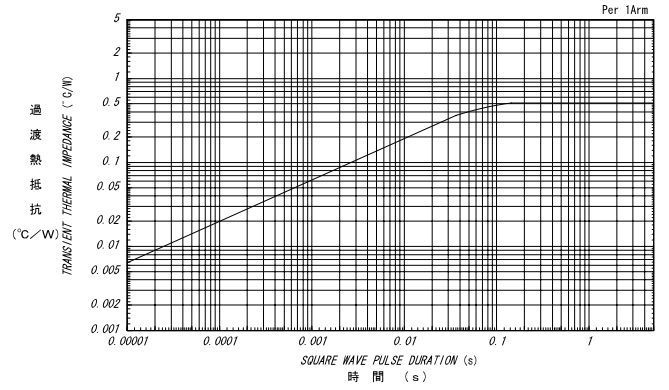
P2H80F2 OUTLINE DRAWING (Dimensions in mm)



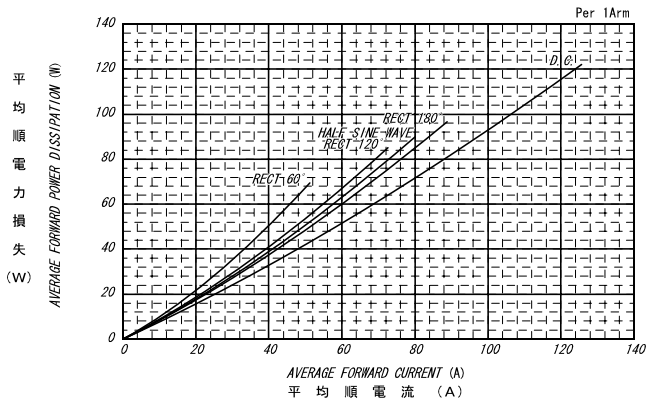
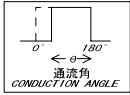
順電圧特性
FORWARD CURRENT VS. VOLTAGE



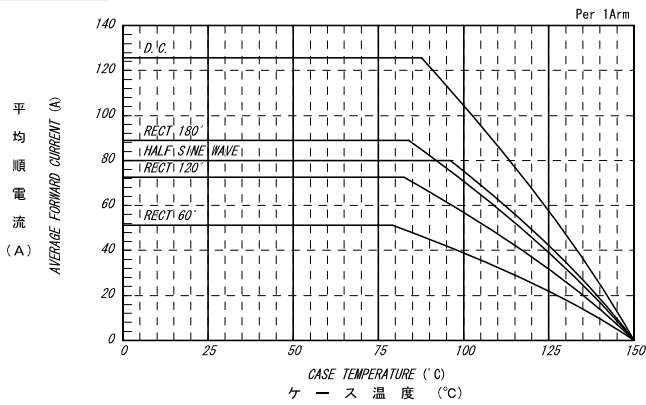
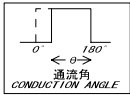
過渡熱抵抗特性
MAXIMUM TRANSIENT THERMAL IMPEDANCE
Junction to Case



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

