Nihon Inter Electronics Corporation

FRD MODULE 30A/200V

P2H30F2

OUTLINE DRAWING

See the Next Page

FEATURES

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

TYPICAL APPLICATIONS

* High Frequency Rectification

Maximum Ratings

Approx Net Weight:35g

Parameter	Symbol	Type / Grade		Unit
		P2H30F2	-	
Repetitive Peak Reverse Voltage *1	V_{RRM}	200	-	V
Non Repetitive Peak Reverse Voltage *1	V_{RSM}	-	-	

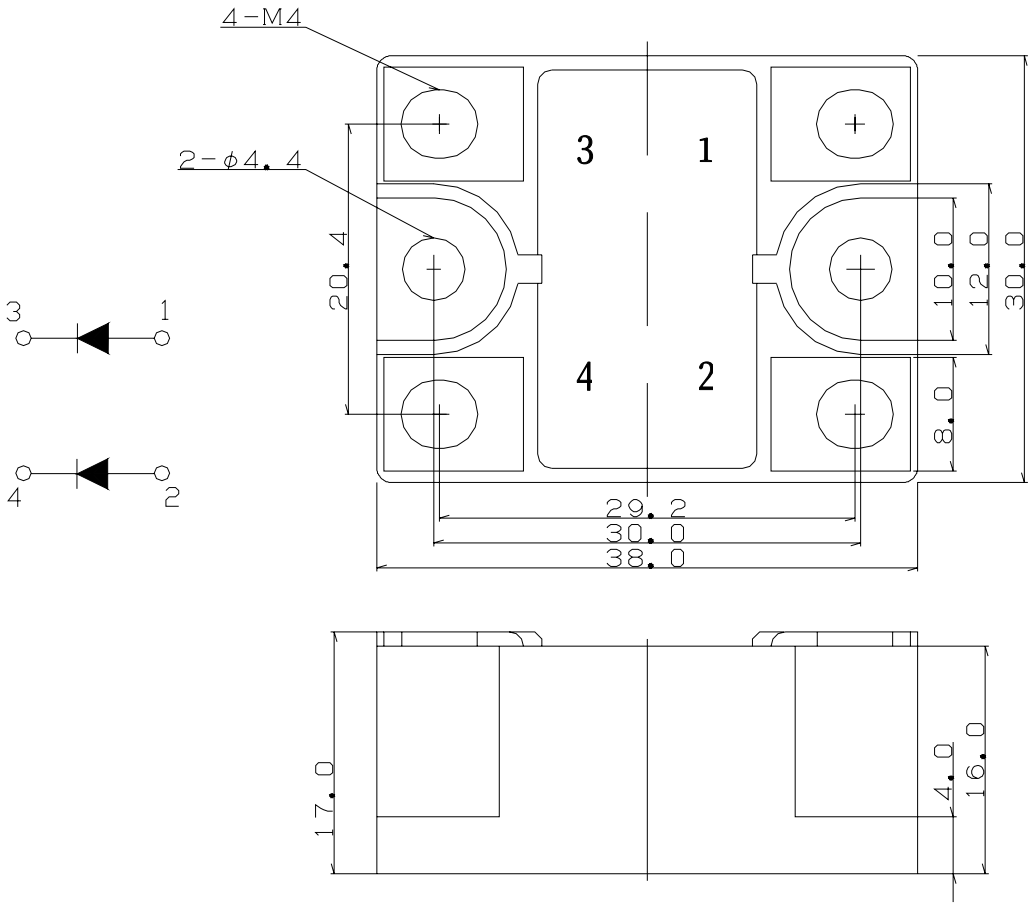
Parameter			Conditions	Max Rated Value	Unit
Average Rectified Output Current *1		$I_{O(AV)}$	50Hz Half Sine Wave condition Tc=87℃	30	A
RMS Forward Current *1		$I_{F(RMS)}$		47	A
Surge Forward Current *1		I_{FSM}	50 Hz Half Sine Wave,1Pulse Non-repetitive	300	A
I Squared t *1		I^2t	2msec to 10msec	450	A^2s
Operating JunctionTemperature Range		Tjw		-40 to +150	℃
Storage Temperature Range		Tstg		-40 to +125	℃
Isoration 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}, Tj= 25℃	25	μA
Peak Forward Voltage *1	V_{FM}	I_{FM}= 30A, Tj=25℃	1.08	V
Reverse Recovery Time	trr	Tj=25℃ , I_{FM}=10A, -di/dt=50A/μs	50	ns
Thermal Resistance *1	Rth(j-c)	Junction to Case	1.53	℃/W
	Rth(c-f)	Base Plate to Heat Sink with Thermal Compound	0.3	

*1: Value Per 1Arm

P2H30F2 OUTLINE DRAWING (Dimensions in mm)



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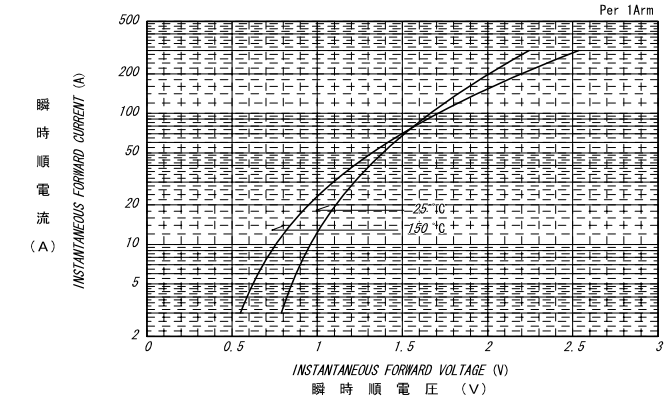
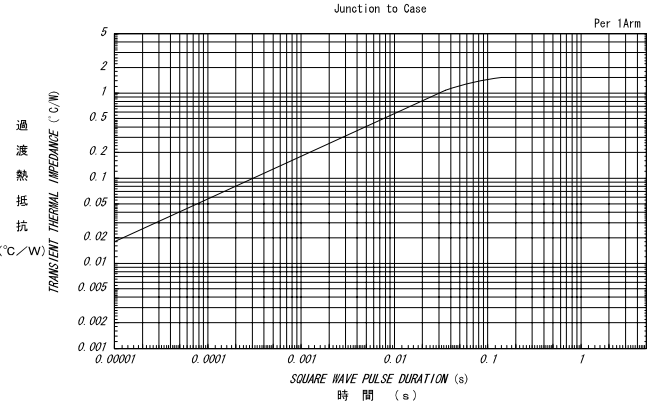
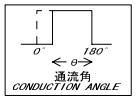
FORWARD CURRENT VS. VOLTAGE



過渡熱抵抗特性
MAXIMUM TRANSIENT THERMAL IMPEDANCE





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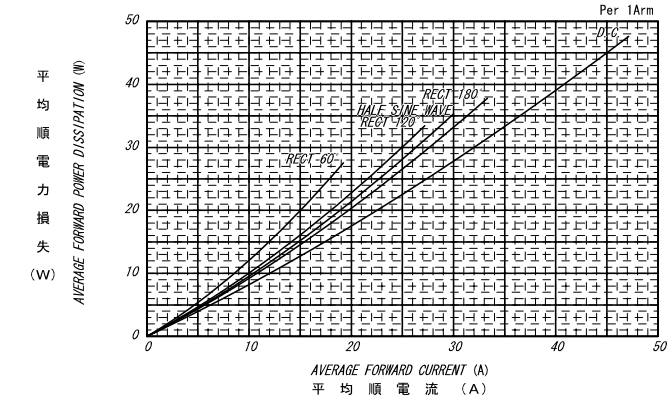
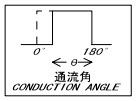
AVERAGE FORWARD POWER DISSIPATION





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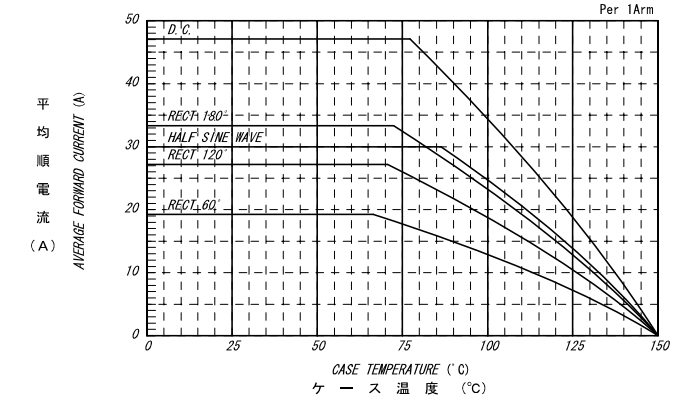
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



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SURGE CURRENT RATINGS