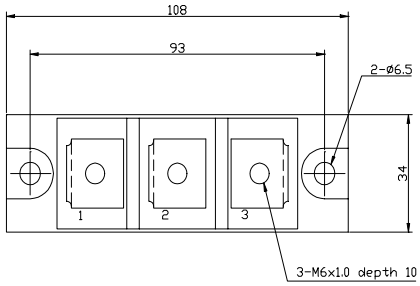
Nihon Inter Electronics Corporation

DIODE MODULE 200A/1600V PD20116

OUTLINE DRAWING

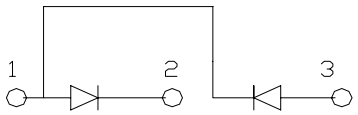
FEATURES

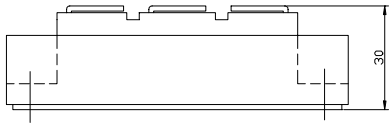
* 108mm Short Size Case
* Isolated Base
* Dual Diodes Cascaded Circuit
* High Surge Capability



TYPICAL APPLICATIONS

* Rectified For General Use





Maximum Ratings

Approx Net Weight:280g

Parameter	Symbol	Type / Grade	Unit
		PD20116	
Repetitive Peak Reverse Voltage *1	V_{RRM}	1600	V
Non Repetitive Peak Reverse Voltage *1	V_{RSM}	1700	

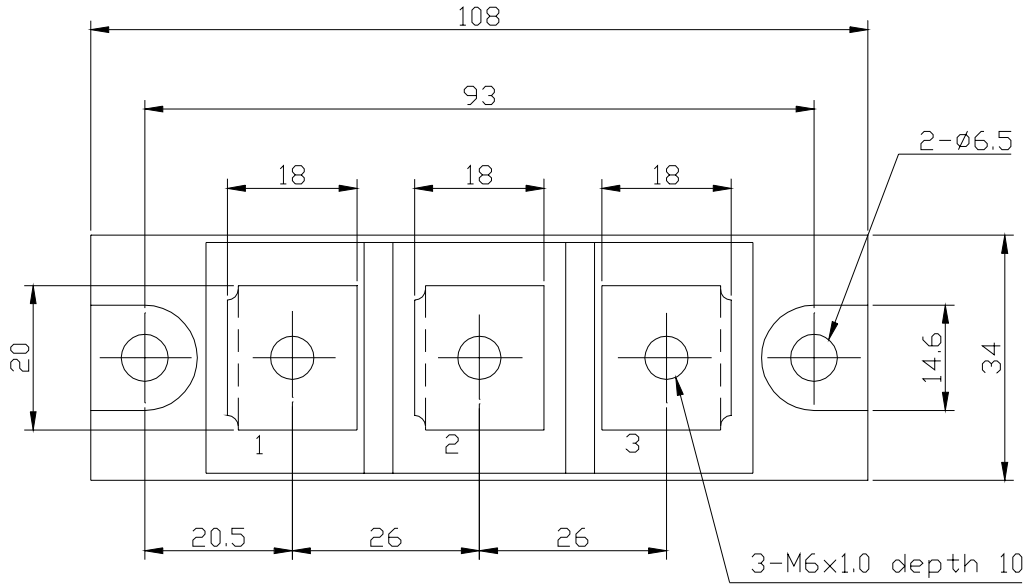
Parameter		Symbol	Conditions	Max Rated Value	Unit
Average Rectified Output Current *1		$I_{O(AV)}$	50 Hz Half Sine Wave condition Tc=98℃	200	A
RMS Forward Current *1		$I_{F(RMS)}$		314	A
Surge Forward Current *1		I_{FSM}	50 Hz Half Sine Wave, 1cycle, Non-Repetitive	4500	A
I Squared t *1		I^2t	2msec to 10msec	101250	A^2s
Operating Junction Temperature 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	M6 Screw	2.5 to 3.5	N•m
	Terminals		M6 Screw	2.5 to 3.5	

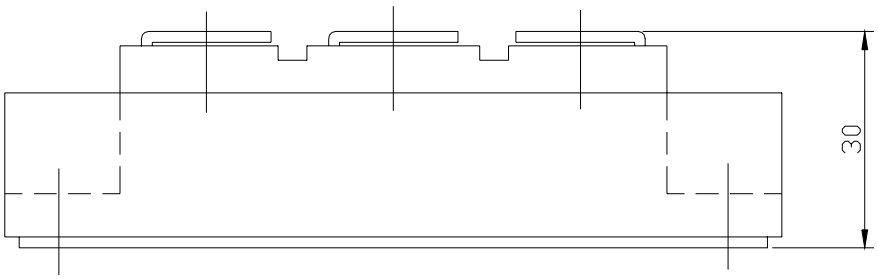
Electrical • Thermal Characteristics

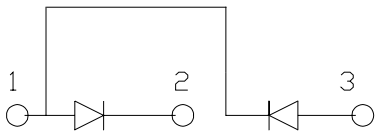
Characteristics	Symbol	Test Conditions	Max.	Unit
Peak Reverse Current *1	I_{RM}	V_{RM}= V_{RRM}, Tj= 150℃	30	mA
Peak Forward Voltage *1	V_{FM}	I_{FM}= 600A, Tj=25℃	1.33	V
Thermal Resistance *1	Rth(j-c)	Junction to Case	0.2	℃/W
	Rth(c-f)	Case to Fin, Greased	0.15	

*1: Value Per 1Arm

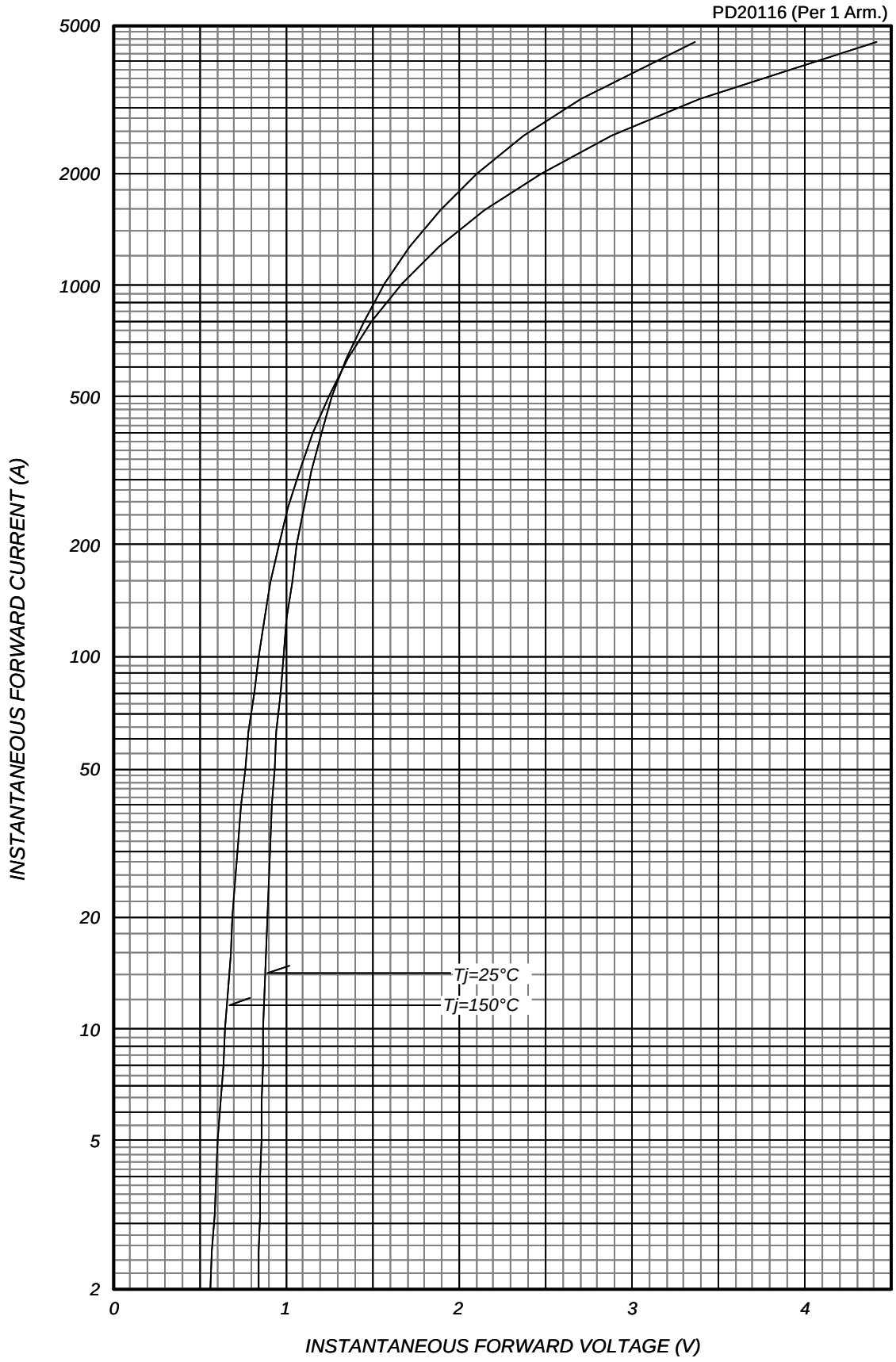
PD20116 OUTLINE DRAWING (Dimensions in mm)

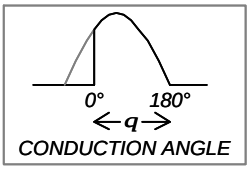




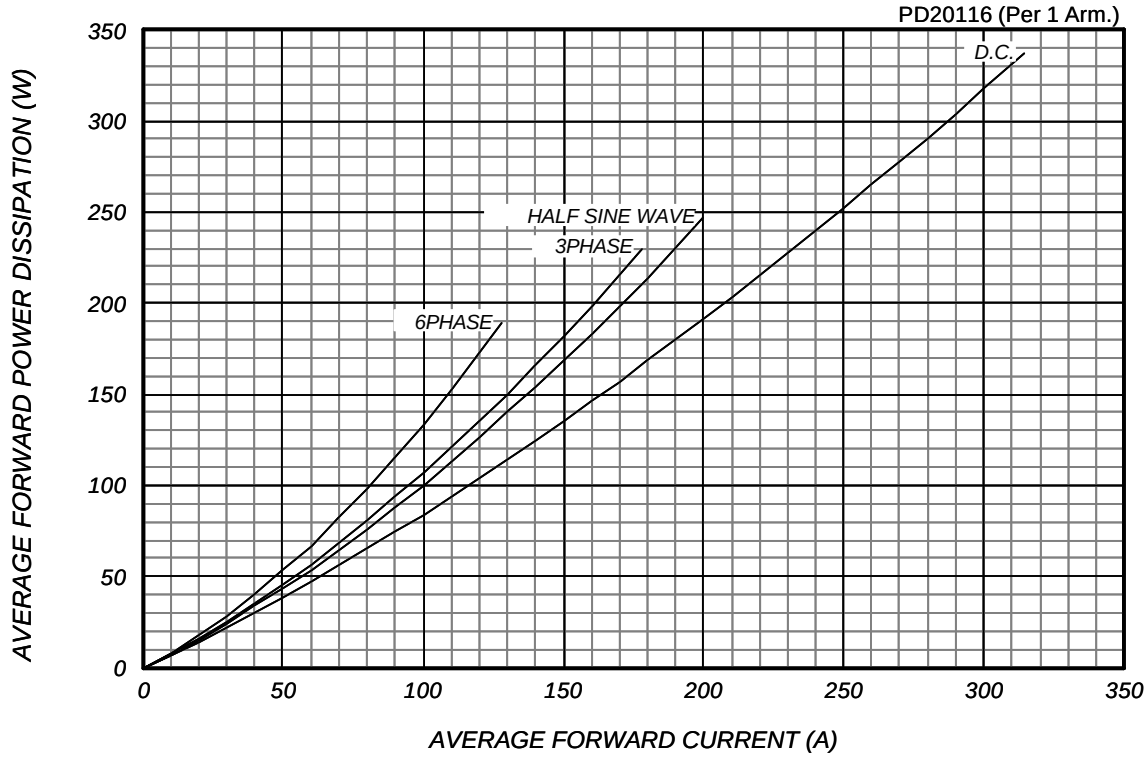


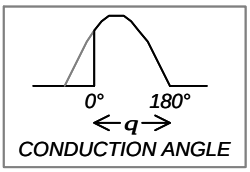
FORWARD CURRENT VS. VOLTAGE



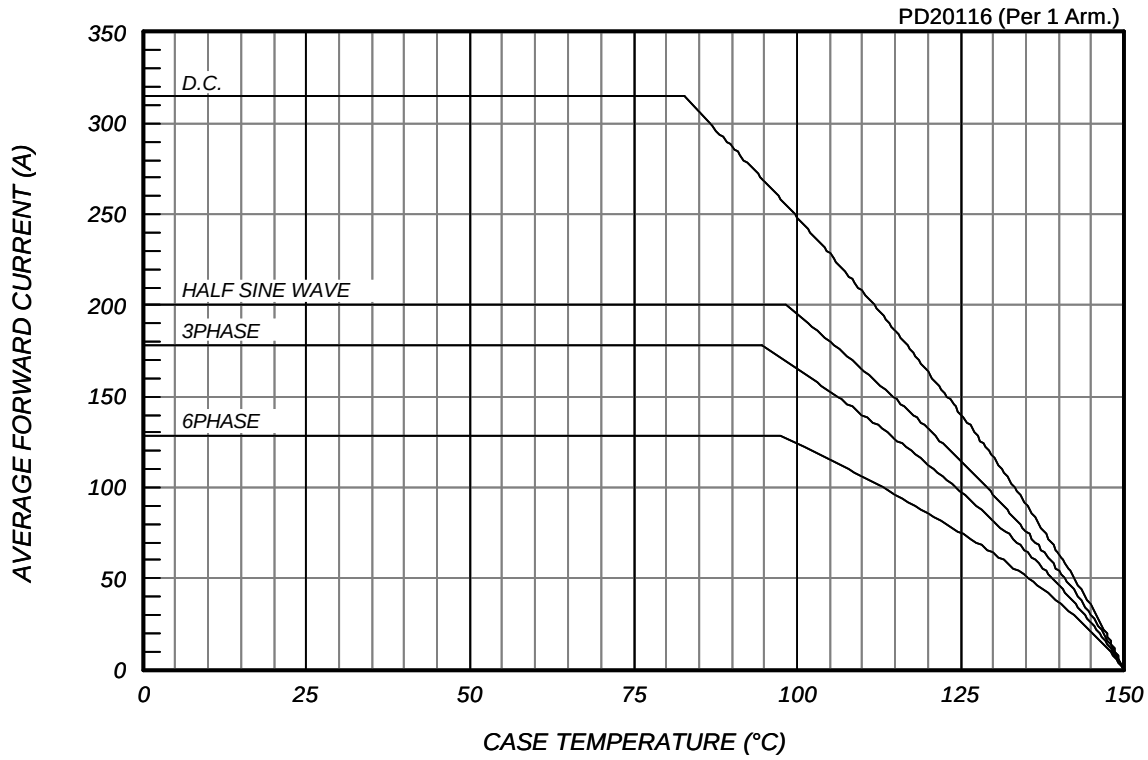


AVERAGE FORWARD POWER DISSIPATION





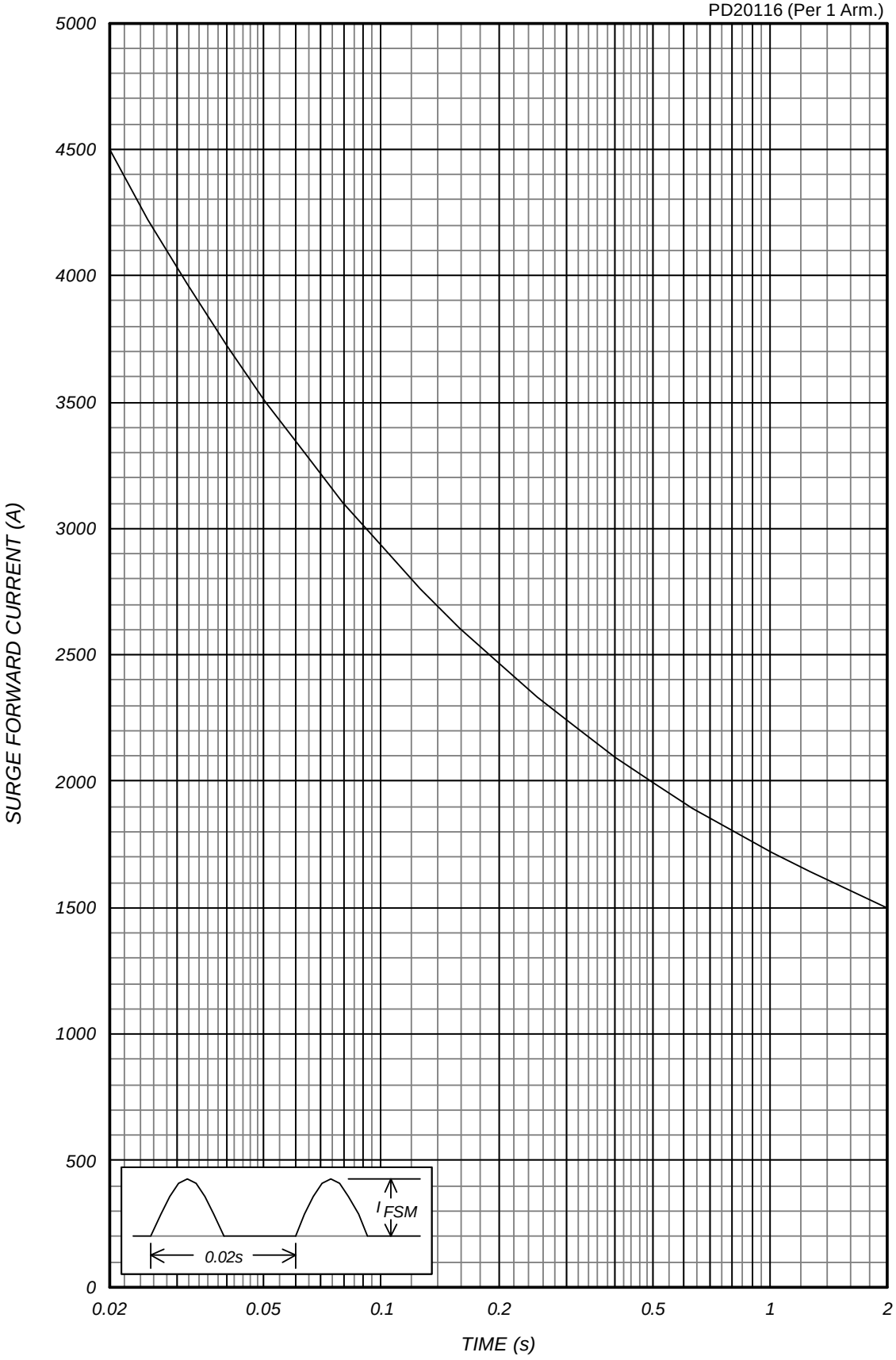
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



SURGE CURRENT RATINGS

f=50Hz,Half Sine Wave,Non-Repetitive,Tj=150°C

PD20116 (Per 1 Arm.)



MAXIMUM TRANSIENT THERMAL IMPEDANCE

Junction to Case

PD20116