

DIODE MODULE 200A/800V

PD2018

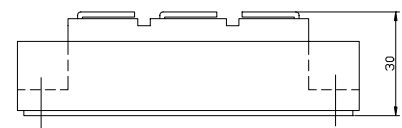
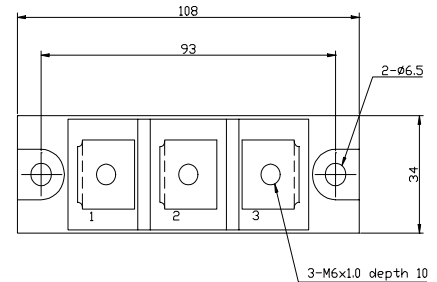
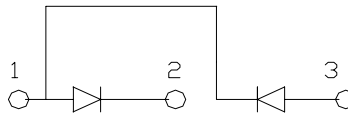
OUTLINE DRAWING

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
		PD2018	
Repetitive Peak Reverse Voltage *1	V_{RRM}	800	V
Non Repetitive Peak Reverse Voltage *1	V_{RSM}	900	

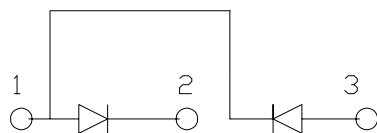
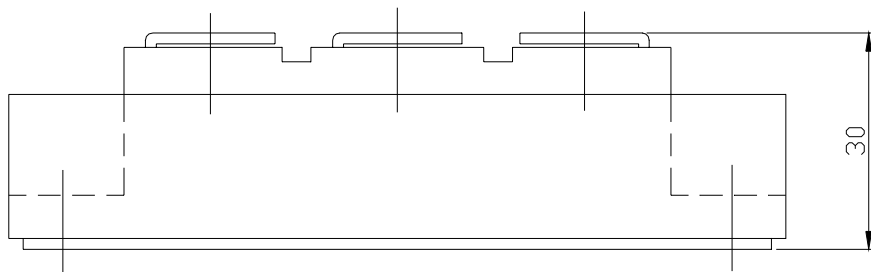
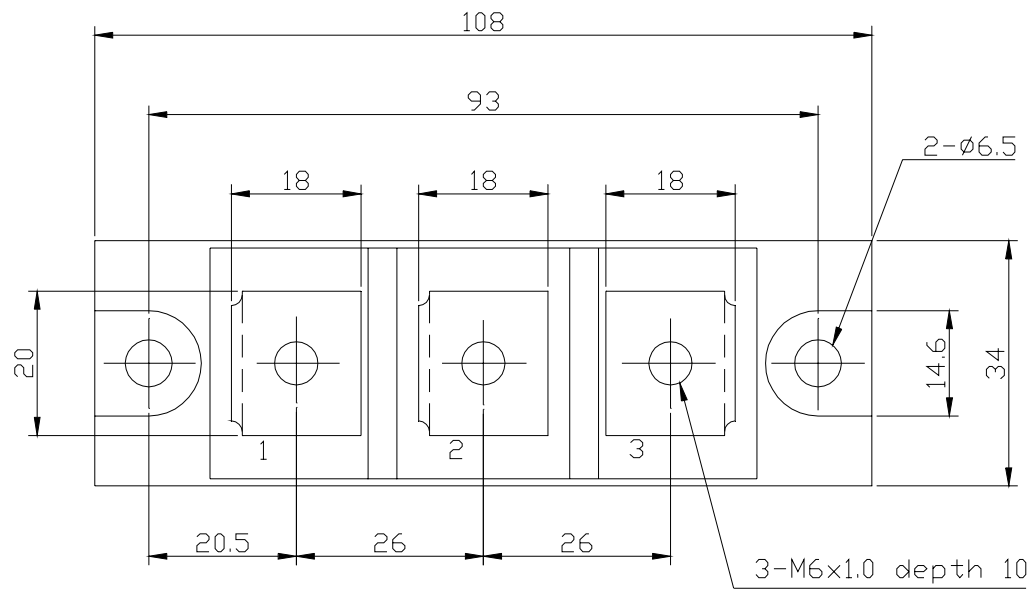
Parameter	Symbol	Conditions	Max Rated Value	Unit
Average Rectified Output Current *1	$I_{O(AV)}$	50 Hz Half Sine Wave condition $T_c=94^{\circ}\text{C}$	200	A
RMS Forward Current *1	$I_{F(RMS)}$		314	A
Surge Forward Current *1	I_{FSM}	50 Hz Half Sine Wave, 1cycle, Non-Repetitive	4000	A
I Squared t *1	I^2t	2msec to 10msec	80000	A^2s
Operating Junction Temperature Range	T_{jw}		-40 to +150	$^{\circ}\text{C}$
Storage Temperature Range	T_{stg}		-40 to +125	$^{\circ}\text{C}$
Isolation Voltage	V_{iso}	Base Plate to Terminals, AC1min	2500	V
Mounting Torque	Case Mounting	F_{tor}	M6 Screw	2.5 to 3.5
	Terminals		M6 Screw	2.5 to 3.5

Electrical • Thermal Characteristics

Characteristics	Symbol	Test Conditions	Max.	Unit
Peak Reverse Current *1	I_{RM}	$V_{RM}= V_{RRM}, T_j= 150^{\circ}\text{C}$	30	mA
Peak Forward Voltage *1	V_{FM}	$I_{FM}= 600\text{A}, T_j=25^{\circ}\text{C}$	1.24	V
Thermal Resistance *1	$R_{th(j-c)}$	Junction to Case	0.23	$^{\circ}\text{C/W}$
	$R_{th(c-f)}$	Case to Fin, Greased	0.15	

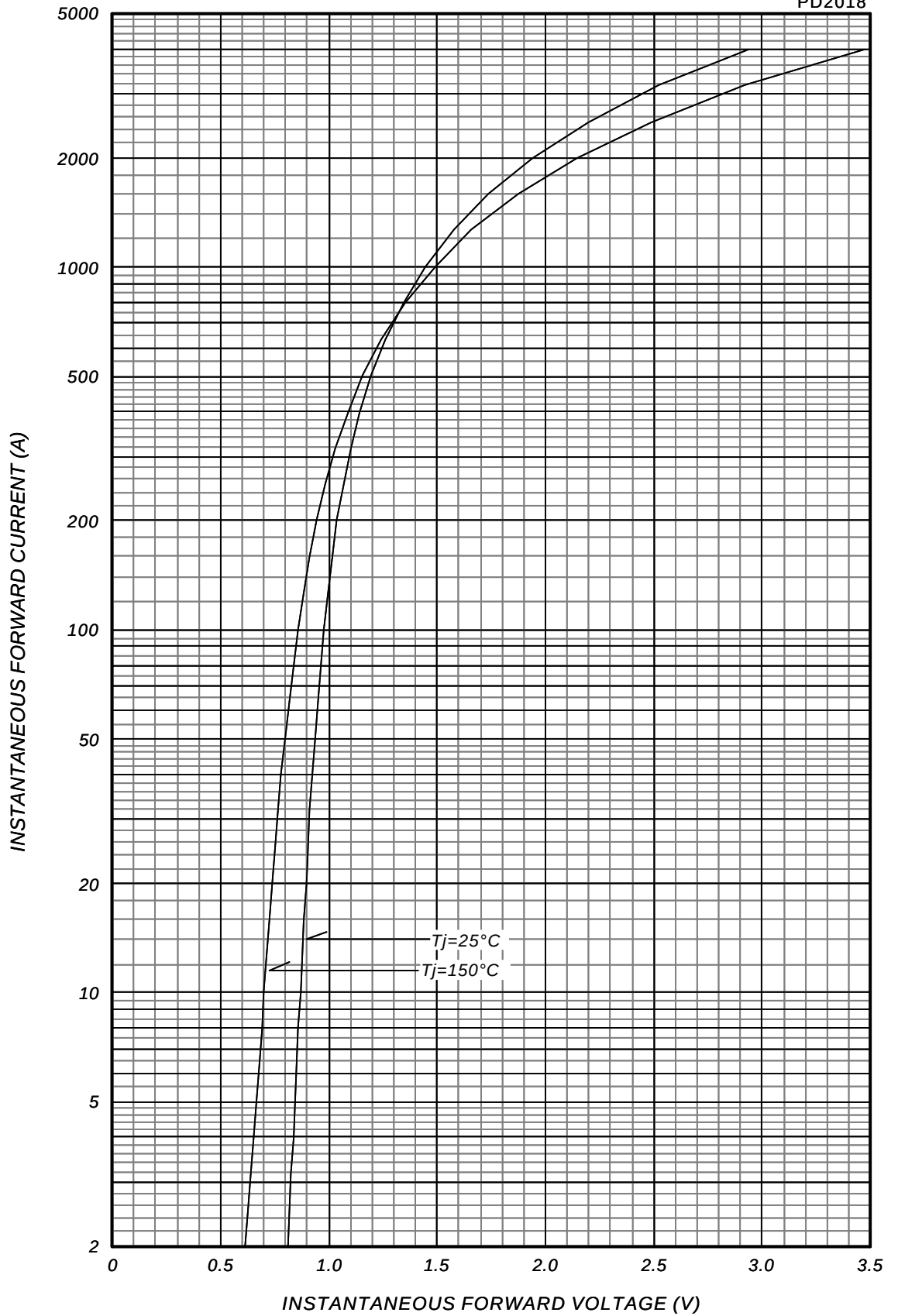
*1: Value Per 1Arm

PD2018 OUTLINE DRAWING (Dimensions in mm)

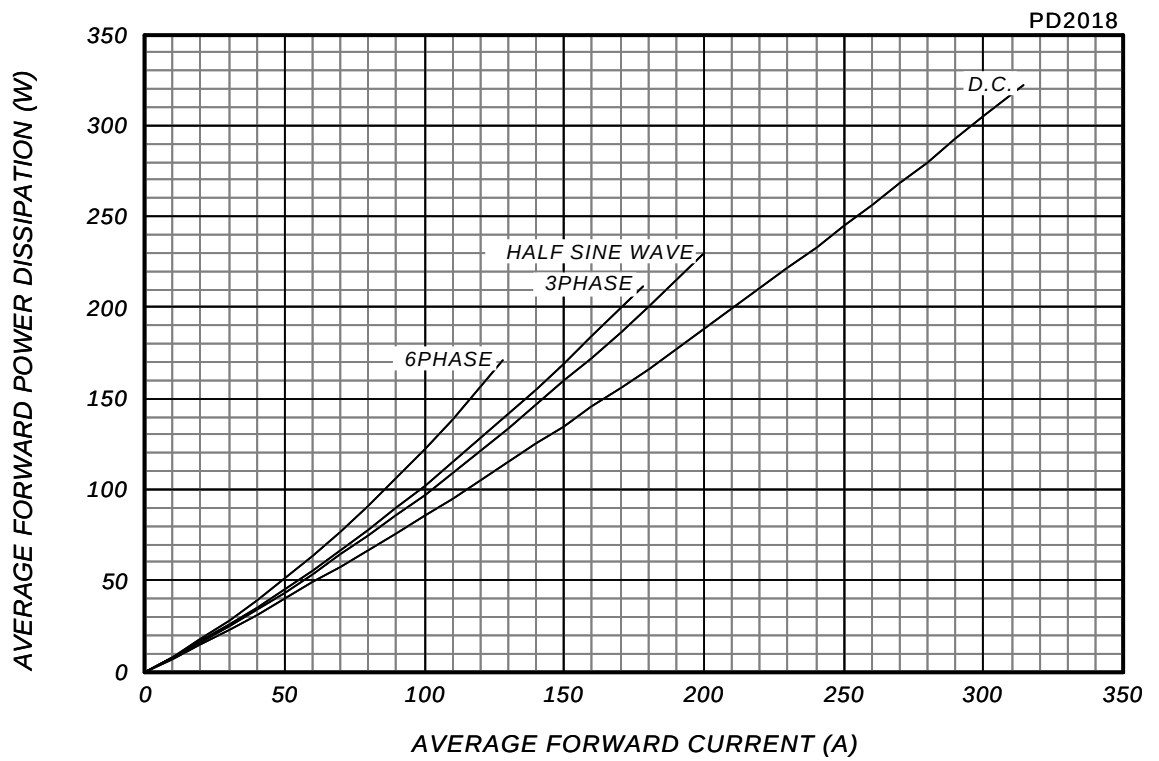


FORWARD CURRENT VS. VOLTAGE

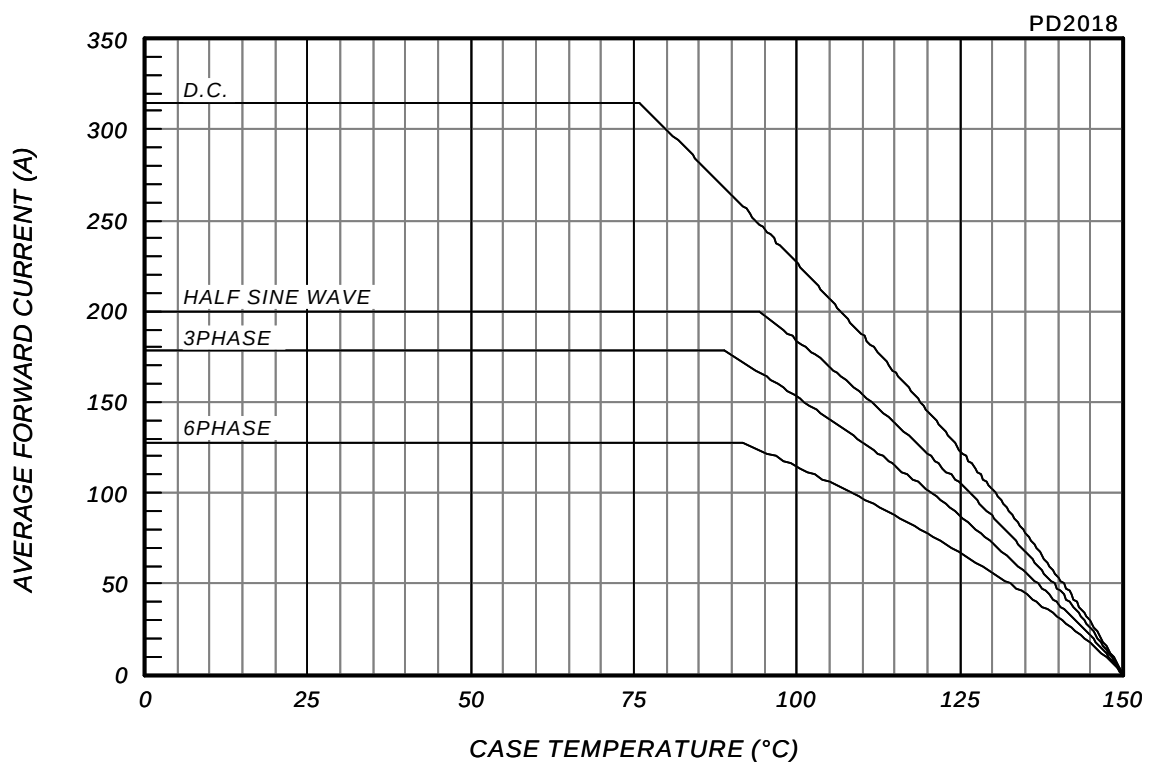
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AVERAGE FORWARD POWER DISSIPATION



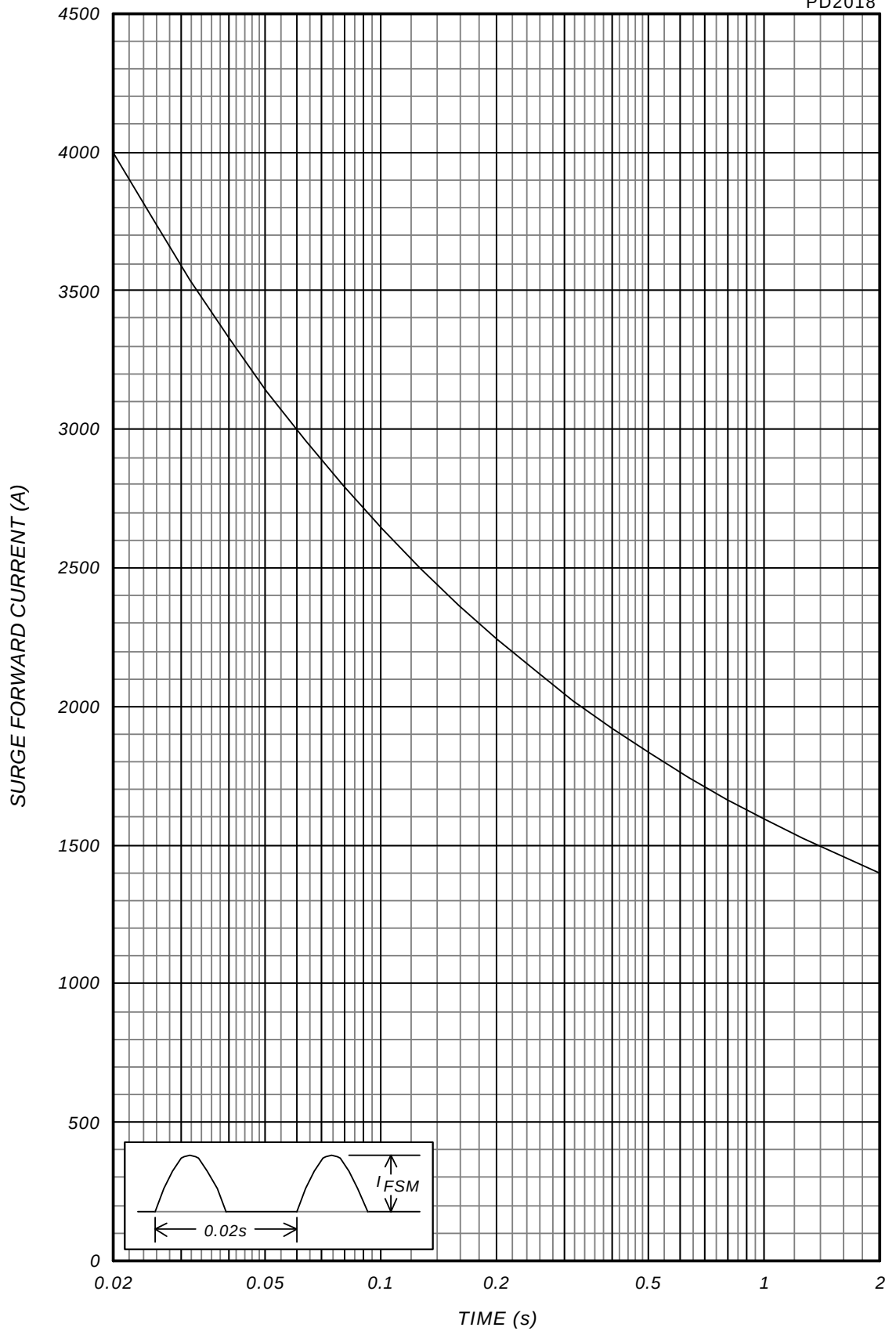
AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



SURGE CURRENT RATINGS

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

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MAXIMUM TRANSIENT THERMAL IMPEDANCE

Junction to Case

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