

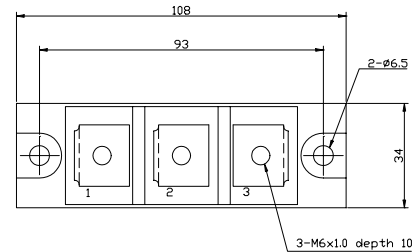
# DIODE MODULE 150A/1600V

# PD15116

## OUTLINE DRAWING

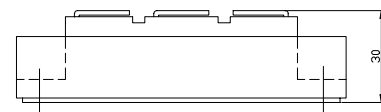
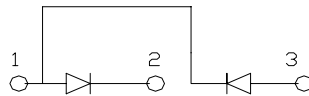
### FEATURES

- \* 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
		PD15116	
Repetitive Peak Reverse Voltage *1	$V_{RRM}$	1600	V
Non Repetitive Peak Reverse Voltage *1	$V_{RSM}$	1700	

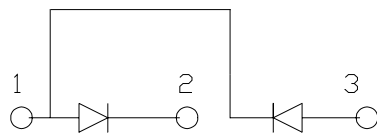
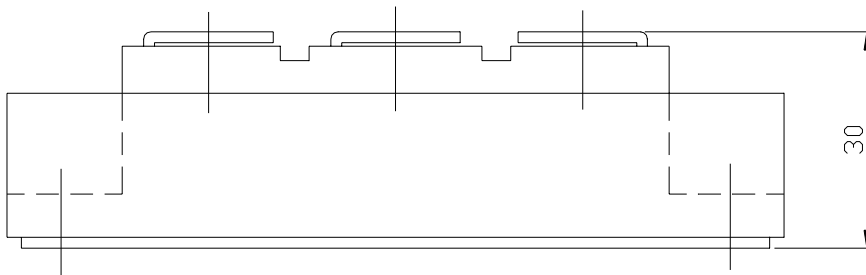
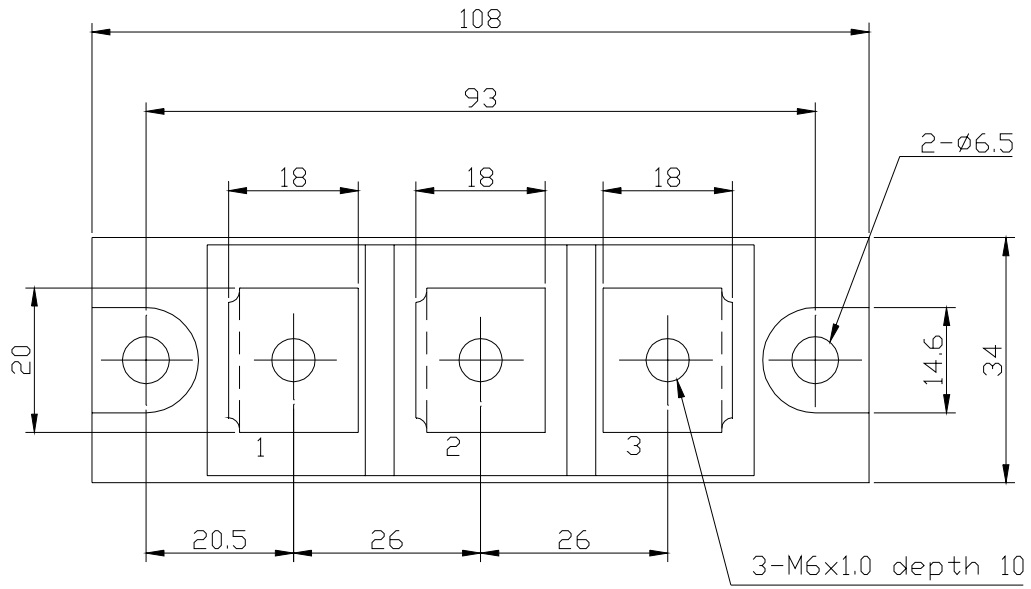
Parameter	Symbol	Conditions	Max Rated Value	Unit
Average Rectified Output Current *1	$I_{O(AV)}$	50 Hz Half Sine Wave condition $T_c=104^{\circ}C$	150	A
RMS Forward Current *1	$I_{F(RMS)}$		235	A
Surge Forward Current *1	$I_{FSM}$	50 Hz Half Sine Wave, 1cycle, Non-Repetitive	3200	A
I Squared t *1	$I^2t$	2msec to 10msec	51200	$A^2s$
Operating Junction Temperature 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	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	$I_{RM}$	$V_{RM}= V_{RRM}, T_j= 150^{\circ}C$	30	mA
Peak Forward Voltage *1	$V_{FM}$	$I_{FM}= 450A, T_j=25^{\circ}C$	1.28	V
Thermal Resistance *1	$R_{th(j-c)}$	Junction to Case	0.25	$^{\circ}C/W$
	$R_{th(c-f)}$	Case to Fin, Greased	0.15	

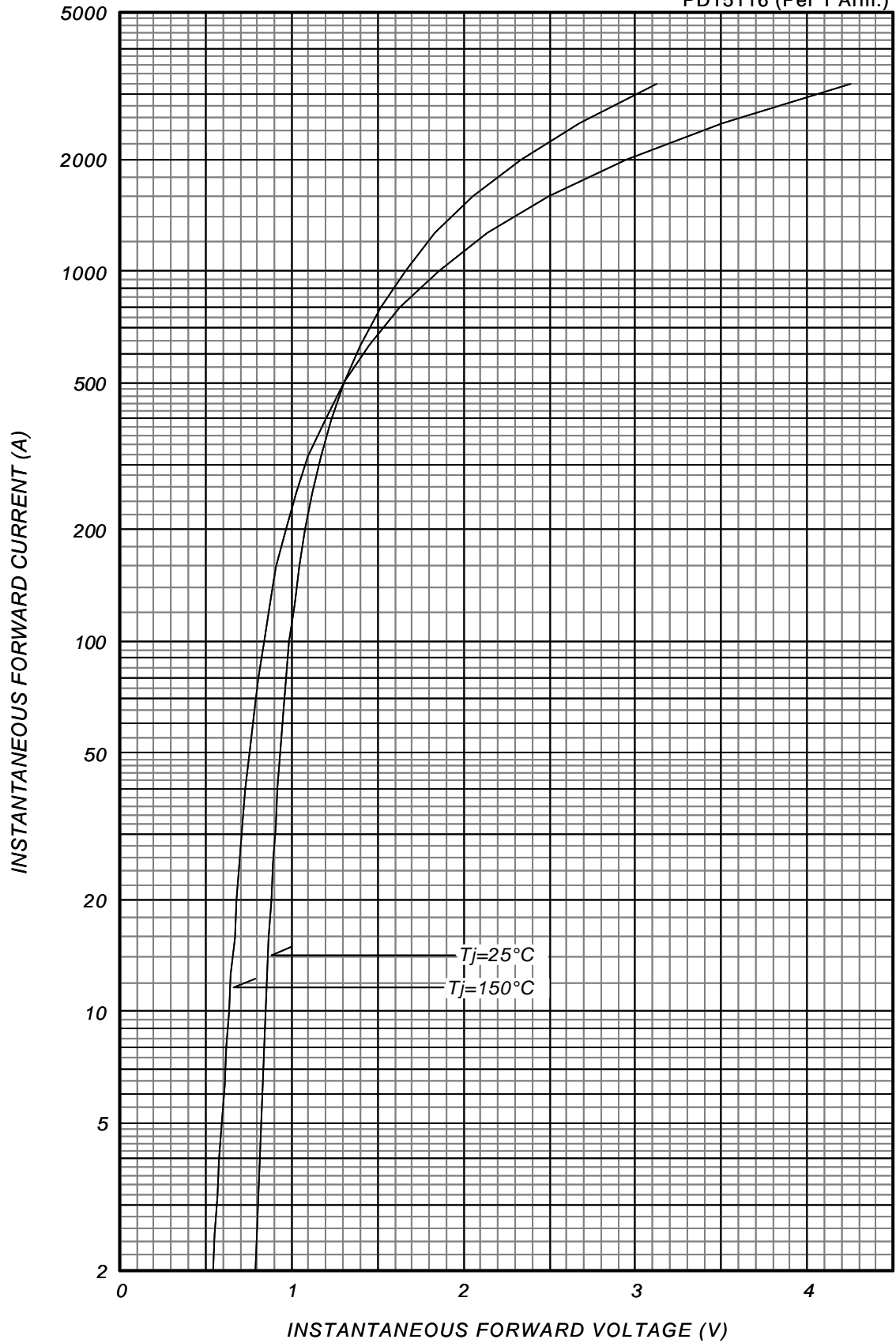
\*1: Value Per 1Arm

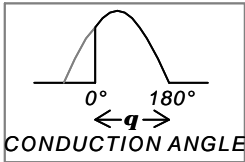
PD15116 OUTLINE DRAWING (Dimensions in mm)



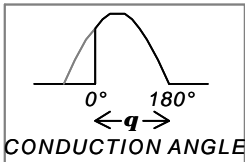
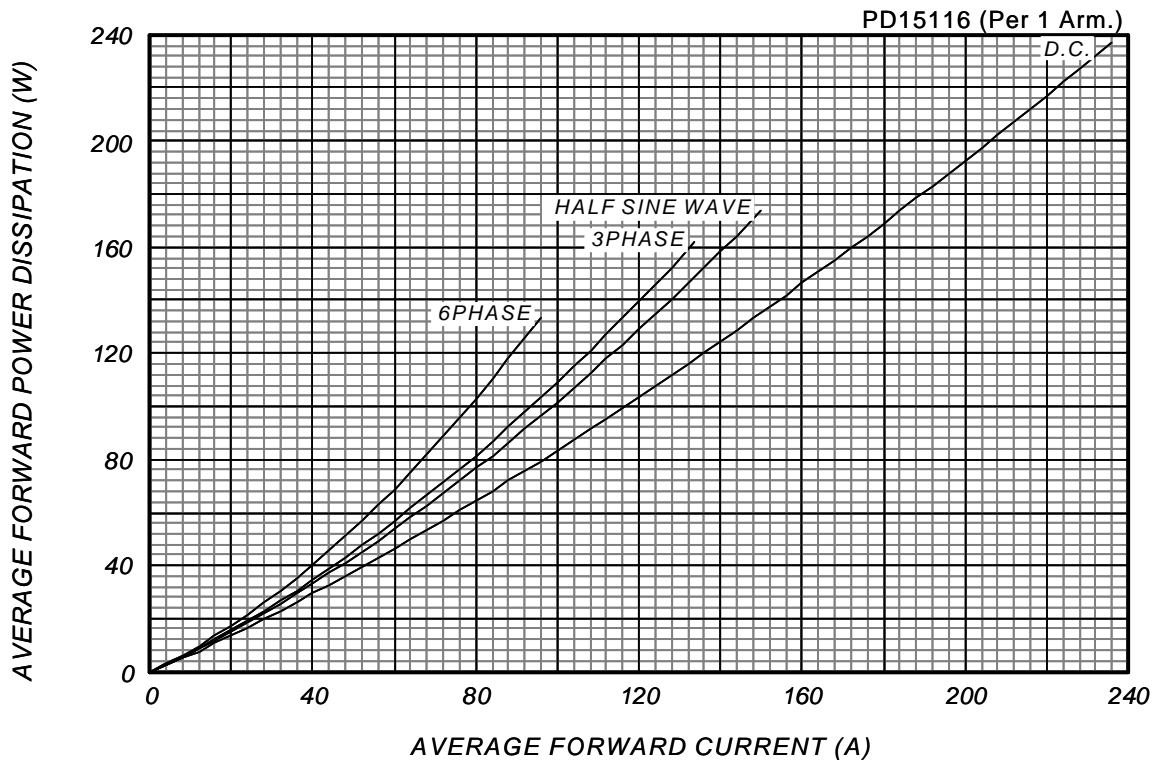
# FORWARD CURRENT VS. VOLTAGE

PD15116 (Per 1 Arm.)

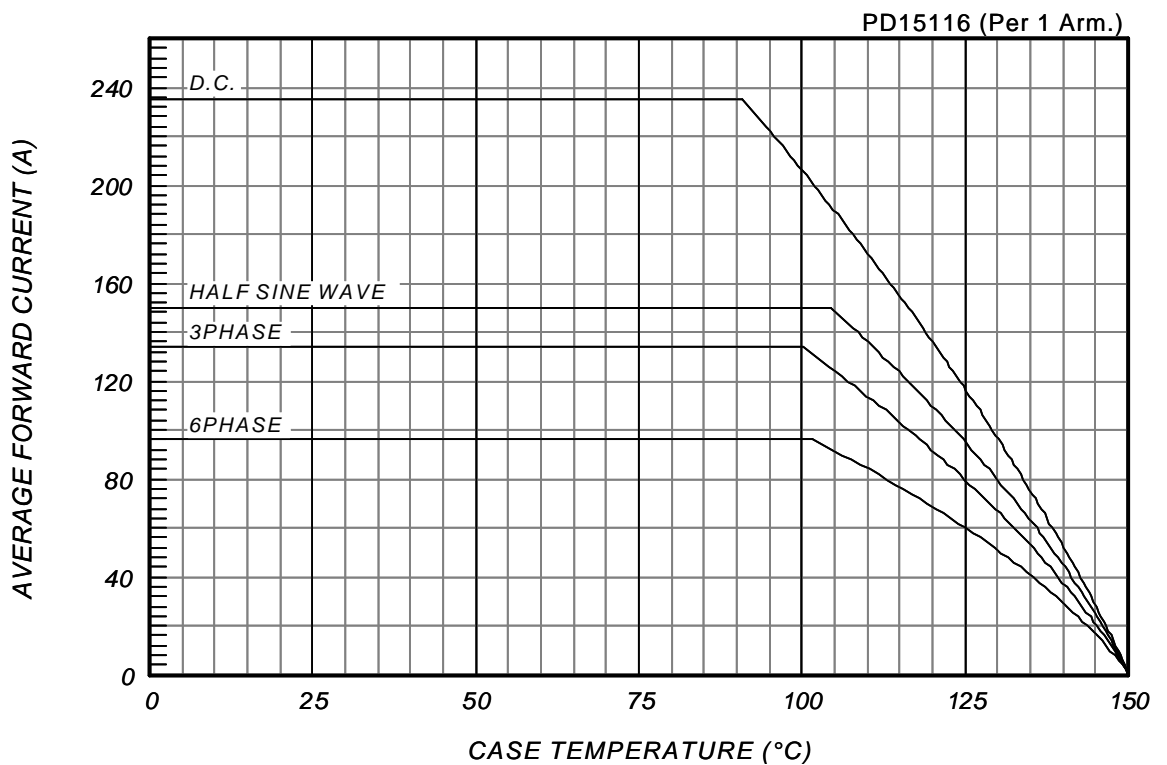




### AVERAGE FORWARD POWER DISSIPATION



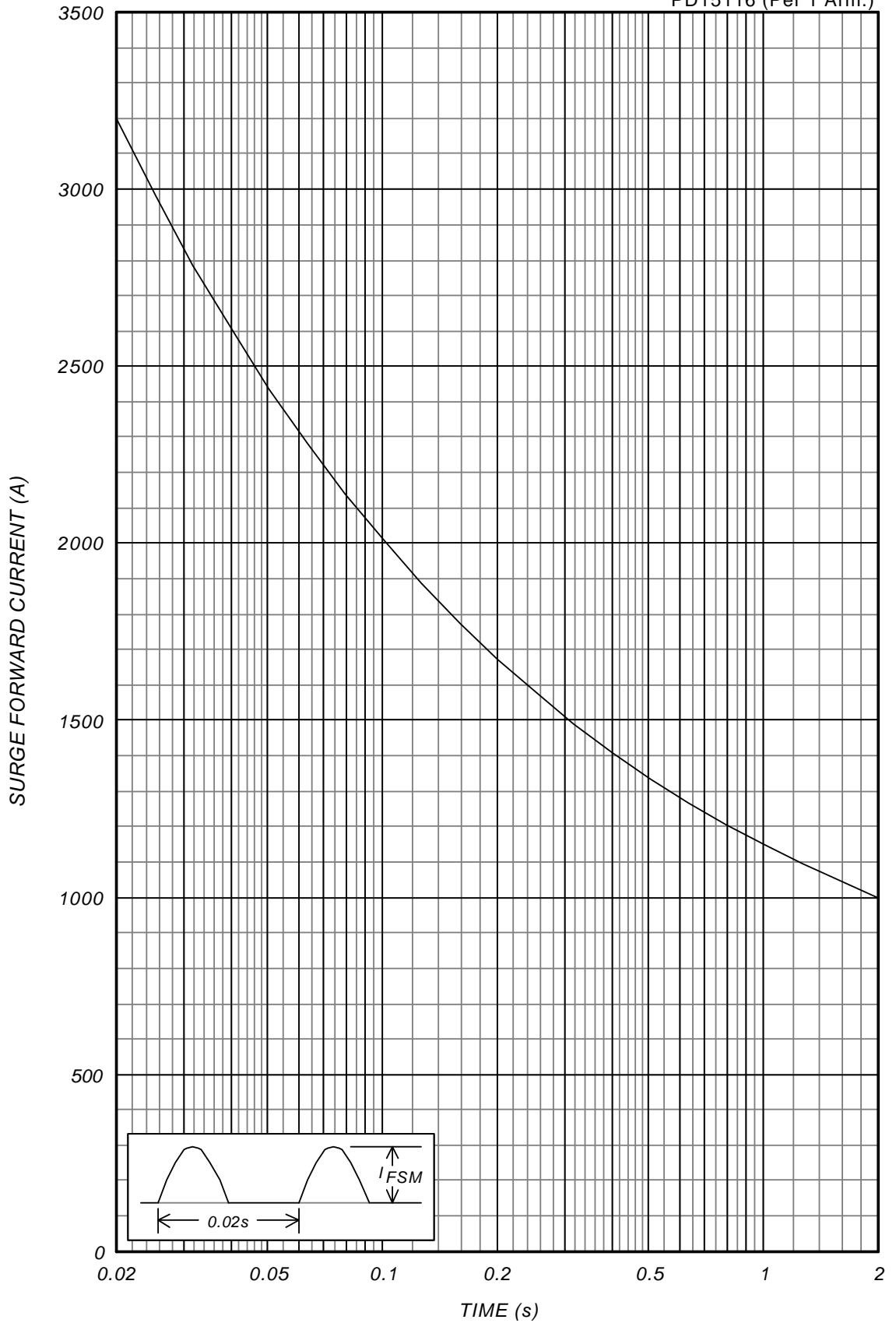
### AVERAGE FORWARD CURRENT VS. CASE TEMPERATURE



# SURGE CURRENT RATINGS

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

PD15116 (Per 1 Arm.)



*MAXIMUM TRANSIENT THERMAL IMPEDANCE*

Junction to Case

PD15116

