

DIODE MODULE 150A/800V

PT151S8

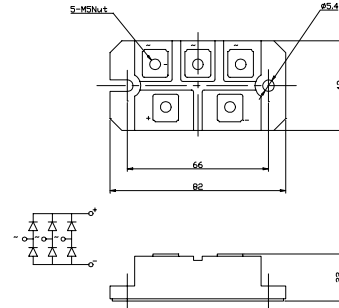
FEATURES

- * Isolated Base
- * 3 Phase Bridge Circuit
- * Designed Power Circuit Board
- * High Surge Capability
- * UL Recognized, File No. E187184

TYPICAL APPLICATIONS

- * Rectified For General Use

OUTLINE DRAWING



Maximum Ratings

Approx Net Weight:180g

Parameter	Symbol	Type / Grade	Unit
		PT151S8	
Repetitive Peak Reverse Voltage *1	V_{RRM}	800	V
Non Repetitive Peak Reverse Voltage *1	V_{RSM}	1000	

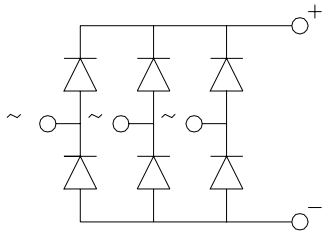
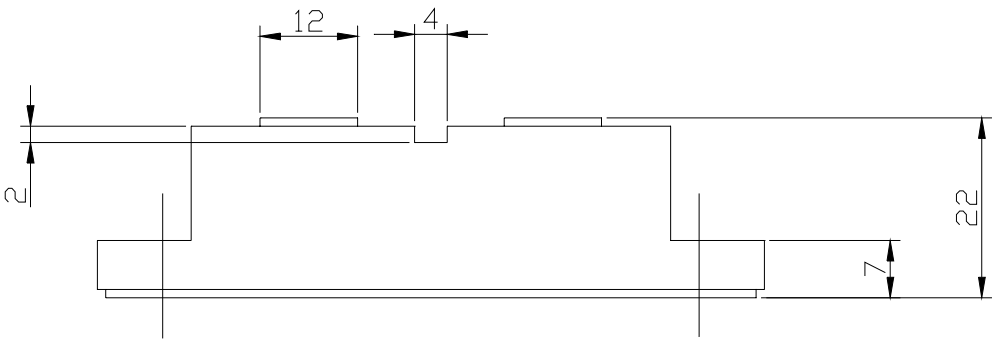
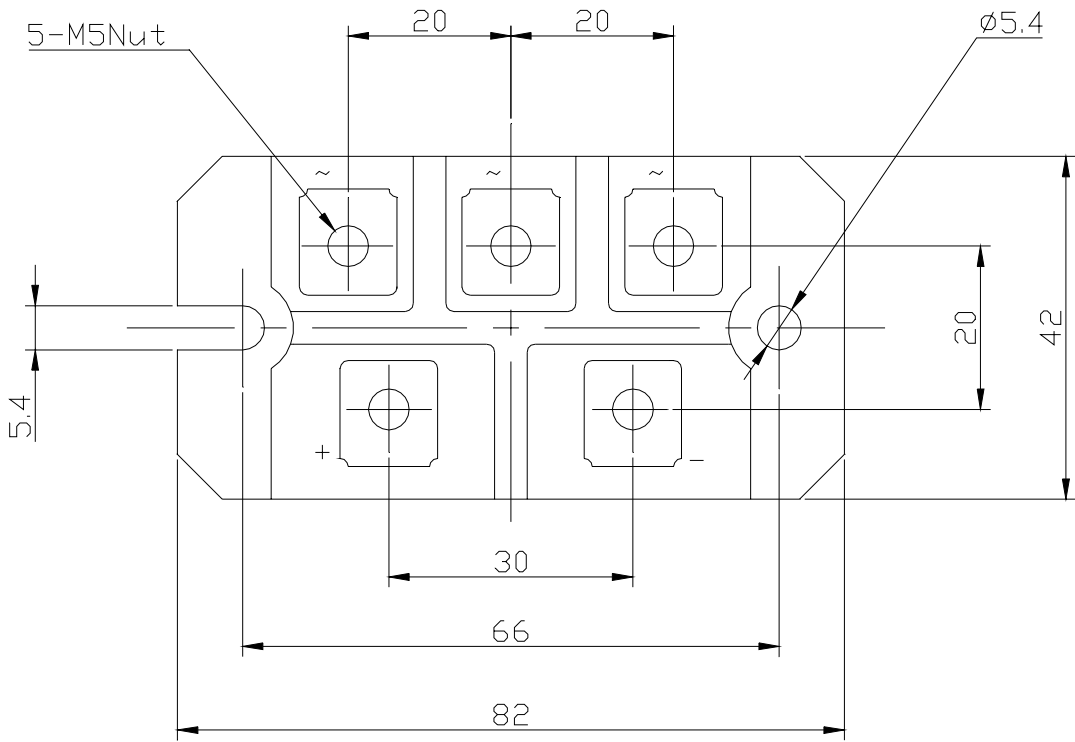
Parameter			Conditions		Max Rated Value	Unit
Average Rectified Output Current		I _{O(AV)}	3-Phase Full Wave Rectified T _c =T _t (Terminal)=92°C		150	A
Surge Forward Current *1		I _{FSM}	50 Hz Half Sine Wave,1Pulse Non-repetitive		1200	A
I Squared t *1		I ² t	2msec to 10msec		7200	A ² s
Operating JunctionTemperature Range		T _{jw}			-40 to +150	°C
Storage Temperature Range		T _{stg}			-40 to +125	°C
Isoration Voltage		Viso	Base Plate to Terminals, AC1min		2500	V
Mounting torque	Case mounting	F _{tor}	Greased	M5 Screw	2.4 to 2.8	N•m
	Terminals		M5		2.4 to 2.8	

Electrical • Thermal Characteristics

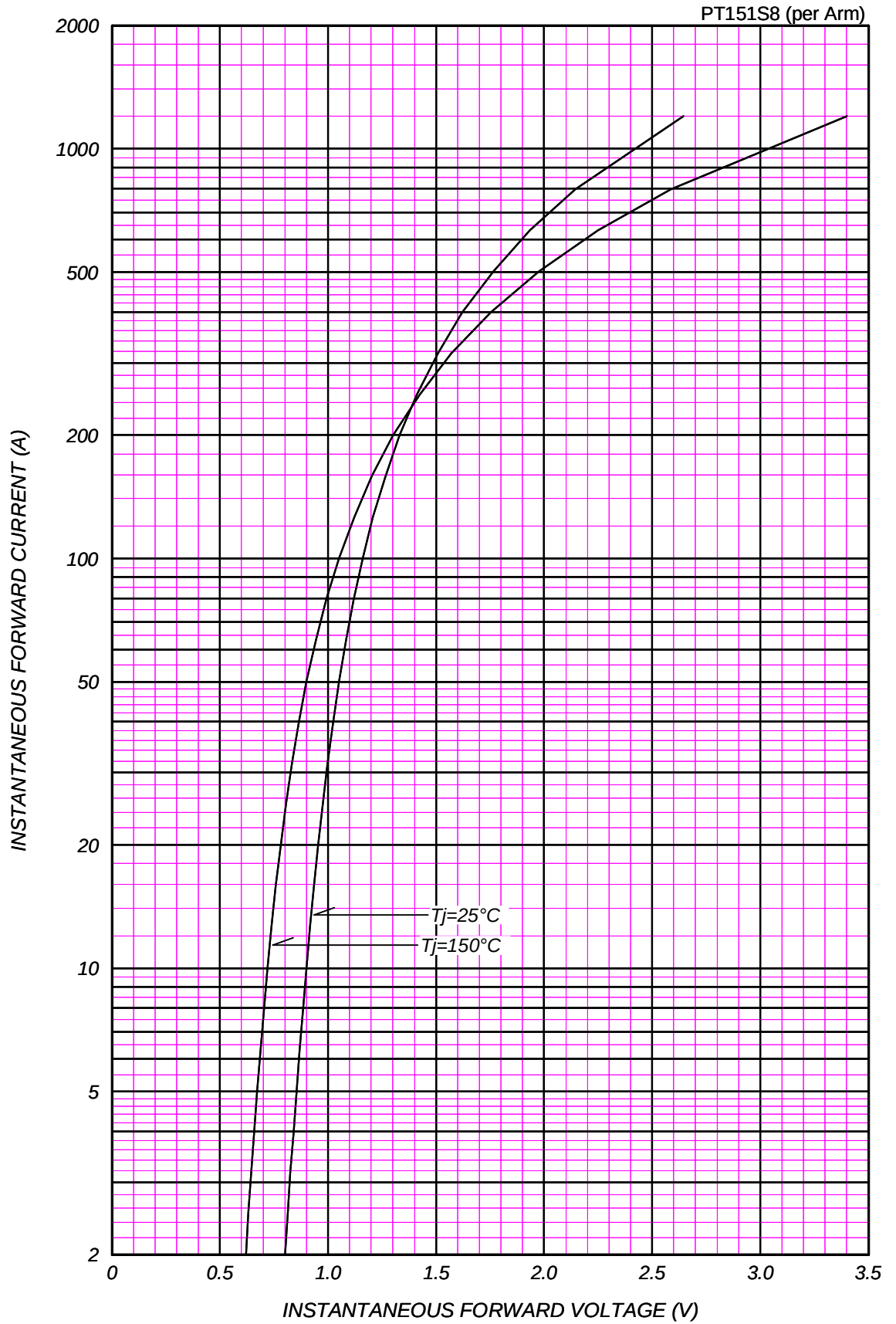
Characteristics	Symbol	Test Conditions	Max.	Unit
Peak Reverse Current *1	I_{RM}	$V_{RM} = V_{RRM}$, $T_j = 150^\circ\text{C}$	10	mA
Peak Forward Voltage *1	V_{FM}	$I_{FM} = 100\text{A}$, $T_j = 25^\circ\text{C}$	1.25	V
Thermal Resistance	$R_{th(j-c)}$	Junction to Case (Total)	0.16	°C/W
	$R_{th(c-f)}$	Base Plate to Heat Sink with Thermal Compound (Total)	0.06	

*1: Value Per 1Arm

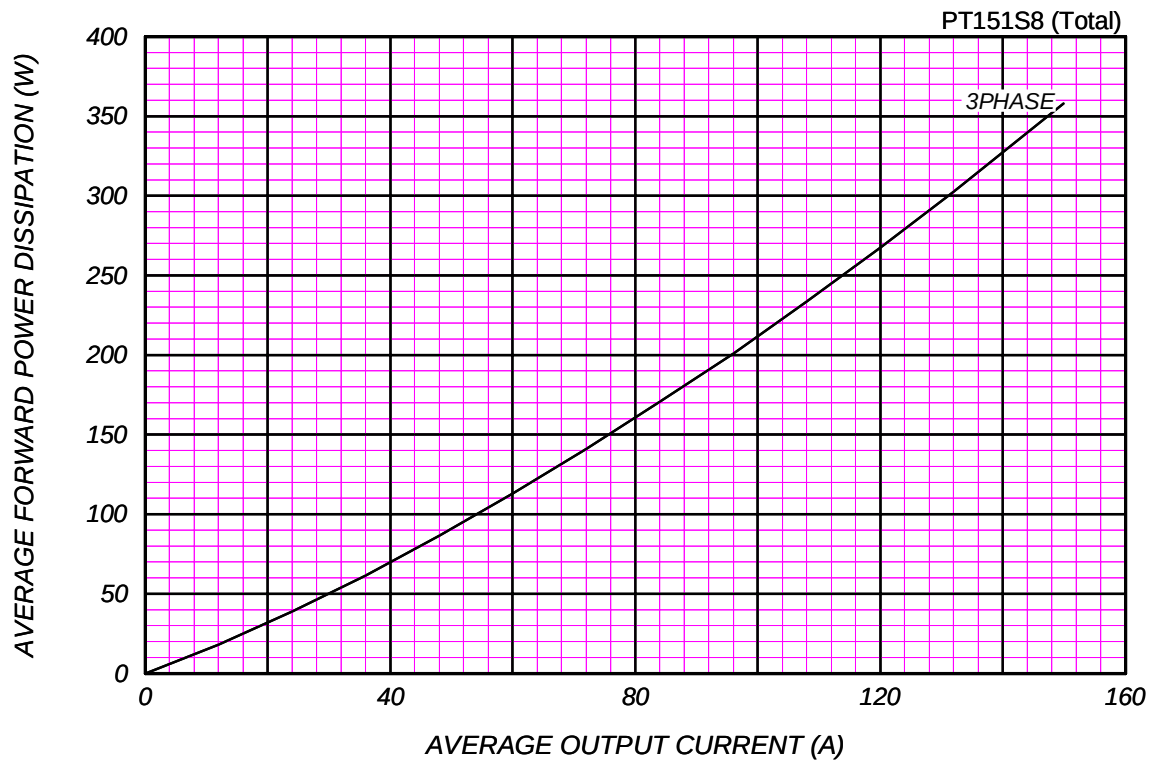
PT151S8 OUTLINE DRAWING (Dimensions in mm)



FORWARD CURRENT VS. VOLTAGE

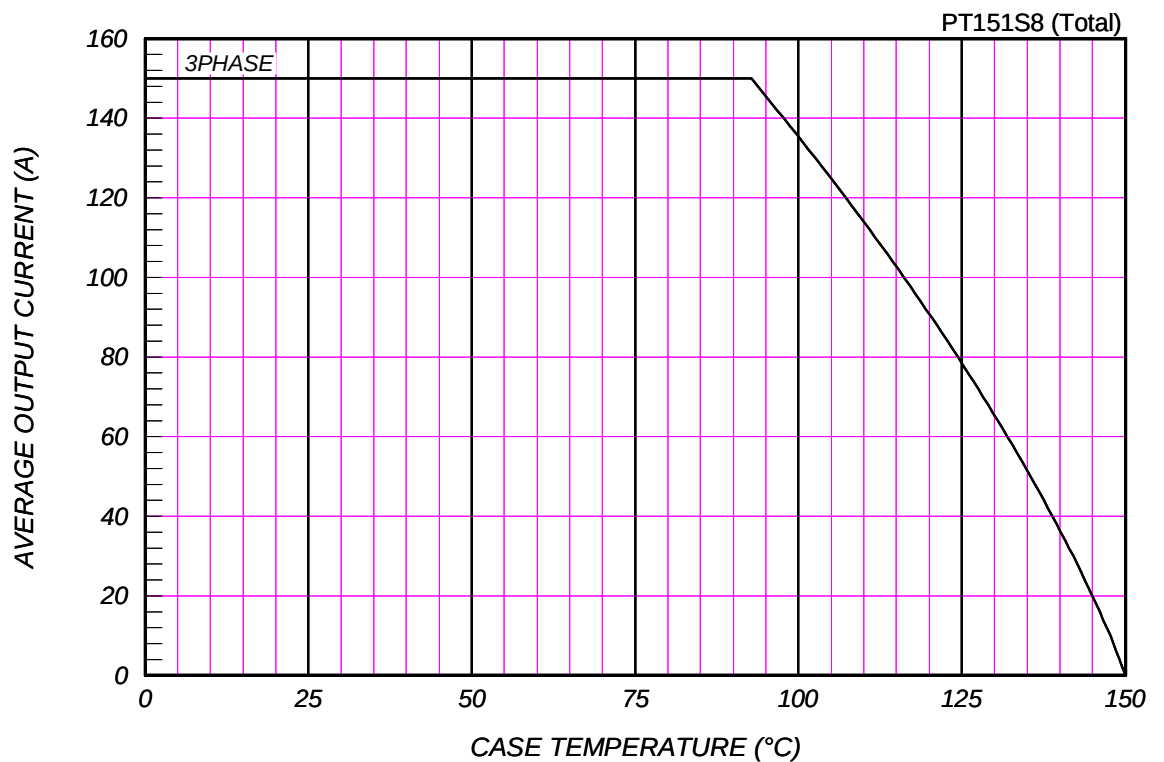


AVERAGE FORWARD POWER DISSIPATION



AVERAGE OUTPUT CURRENT VS. CASE TEMPERATURE

3-Phase Full Wave, Resistive or Inductive Load



SURGE CURRENT RATINGS

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

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