

**FEATURES**

- Available in Normal & Reverse Polarity
- All Diffused Series
- Industrial Grade
- Suitable for rotating

**TYPICAL APPLICATIONS**

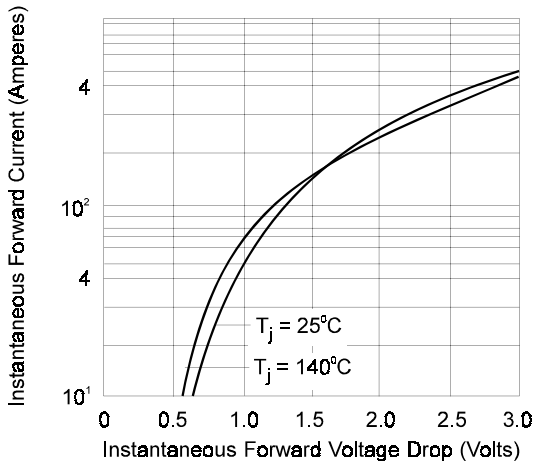
- Alternator

**TECHNICAL DATA**

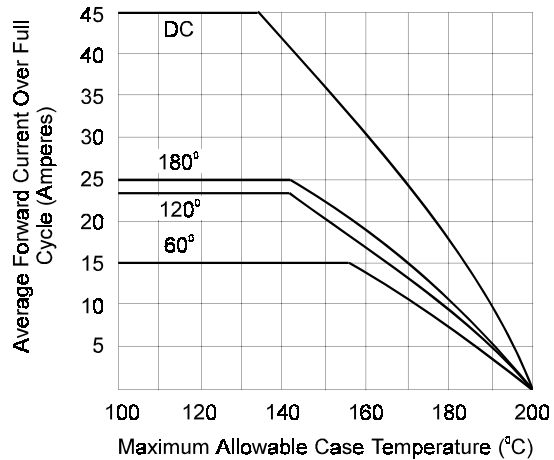
DEVICE TYPE	V <sub>RRM</sub> (V)	V <sub>RSM</sub> (V)
TP25N/TP25R	1200	1300



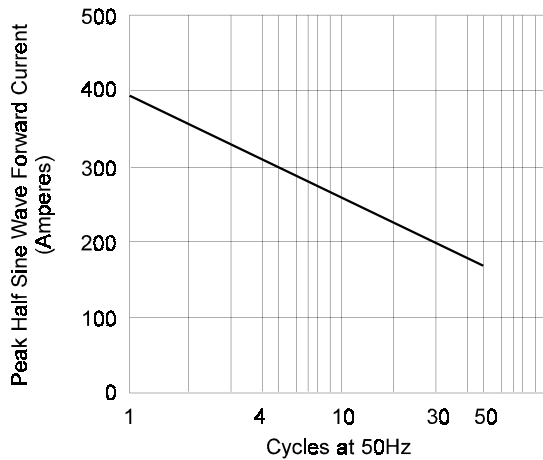
SYMBOL	CONDITIONS	VALUES
I <sub>F(AV)</sub>	Maximum average forward Current T <sub>c</sub> = 140°C	25 A
V <sub>FM</sub>	Maximum peak forward Voltage drop @ Rated I <sub>F (Peak)</sub>	1.35 V
I <sub>FSM</sub>	Maximum peak one cycle (non-rep.) surge current 10 msec	400 A
I <sup>2</sup> t	Max. I <sup>2</sup> t rating (non-rep.) for 10 msec	800 A <sup>2</sup> Sec
I <sub>RRM</sub>	Peak reverse current at T <sub>vj</sub> = 175°C	4 mA
V <sub>0</sub>	T <sub>vj</sub> =max	0.80 V
R <sub>0</sub>	T <sub>vj</sub> =max	6.00 mΩ
R <sub>th(j-c)</sub>	Maximum thermal resistance ( Junction to case)	1.5 °C/W
R <sub>th(c-h)</sub>	Maximum thermal resistance ( Case to heat sink)	0.50 °C/W
T <sub>vj</sub>	Junction temperature	150 °C
T <sub>stg</sub>	Storage temperature	160 °C
Mounting torque		2 Nm
Weight	Approx.	10 gms
Package Outline		A



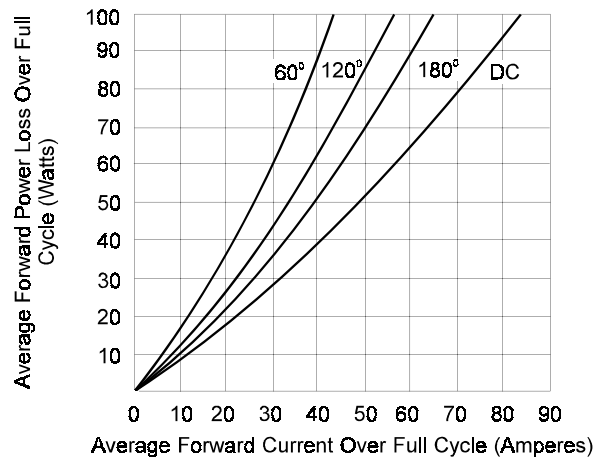
**Fig. 1 - Forward Voltage Drop Vs. Forward Current**



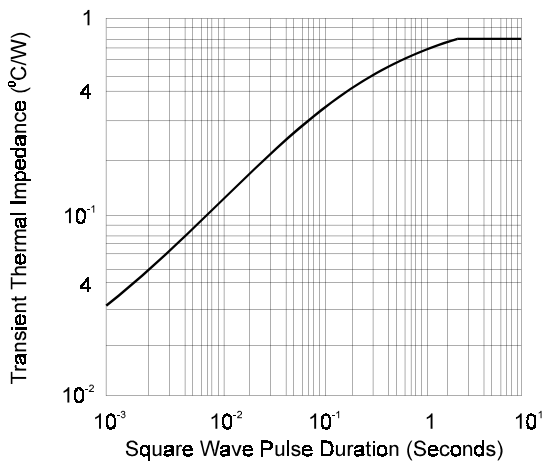
**Fig. 2 - Average Forward Current Vs. Case Temperature**



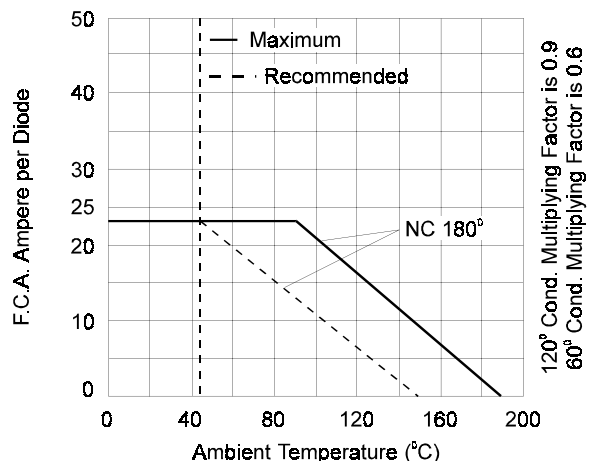
**Fig. 3 - Maximum Non Recurrent Surge Current**



**Fig. 4 - Maximum Forward Power Loss Vs. Low Level Forward Current**

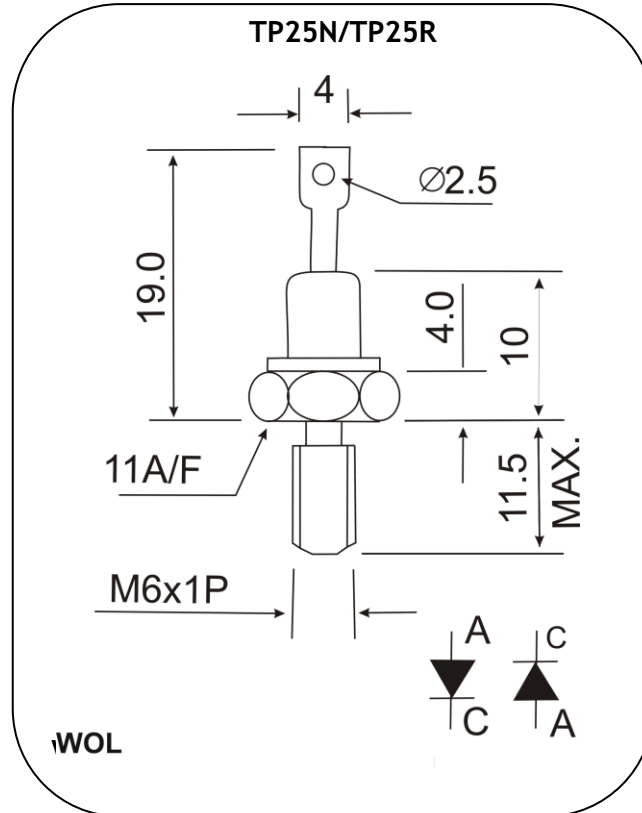


**Fig. 5 - Transient Thermal Impedance**



**Fig. 6 - Diode Mounted on Heat Sink Type K3 with  $\theta_{HA}$ -2.8° C/W**

**PACKAGE OUTLINE**



All dimensions are in mm.

**Insel Rectifiers (India) Pvt. Ltd.**

(An ISO 9001:2015, ISO 14001:2015 Certified Company)

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