

FEATURES

- Available in Normal & Reverse Polarity
- All Diffused Series
- Industrial Grade
- Available in Avalanche Characteristic

TYPICAL APPLICATIONS

- Power supplies
- Machine tool controls
- Battery chargers
- Welders

TECHNICAL DATA

DEVICE TYPE	V_{RRM} (V)	V_{RSM} (V)
6NA40/6RA40	400	500
6NA120/6RA120	1200	1300
6NA160/6RA160	1600	1700



SYMBOL	CONDITIONS	VALUES
$I_{F(AV)}$	Maximum average forward Current TC = 160°C	6A
V_{FM}	Maximum peak forward Voltage drop @ Rated I_F (Peak)	1.10 V
I_{FSM}	Maximum peak one cycle (non-rep.) surge current 10 msec	159 A
I^2t	Max. I^2t rating (non-rep.) for 10 msec	127 A ² Sec
I_{RRM}	Peak reverse current at $T_{vj} = 175^\circ\text{C}$	2 mA
V_0 R_0	$T_{vj} = \text{max}$ $T_{vj} = \text{max}$	0.90 V 50 mΩ
$R_{th(j-c)}$ $R_{th(c-h)}$ T_{vj} T_{stg}	Maximum thermal resistance (Junction to case) Maximum thermal resistance (Case to heat sink) Junction temperature Storage temperature	2.5 °C/W 0.50 °C/W 175 °C 180 °C
Mounting torque		2 Nm
Weight	Approx.	7 gms
Package Outline		A

❖ Available with pigtail on request.

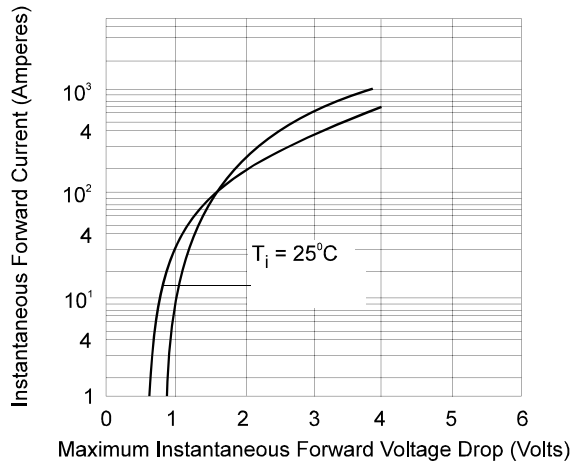


Fig. 1 - Forward Voltage Vs. Forward Current

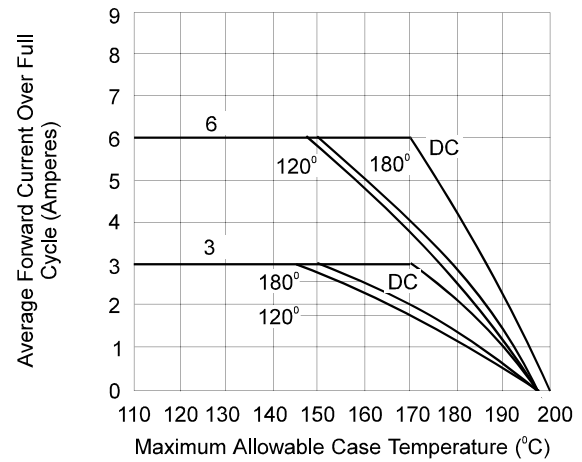


Fig. 2 - Average Forward Current Vs. Case Temperature

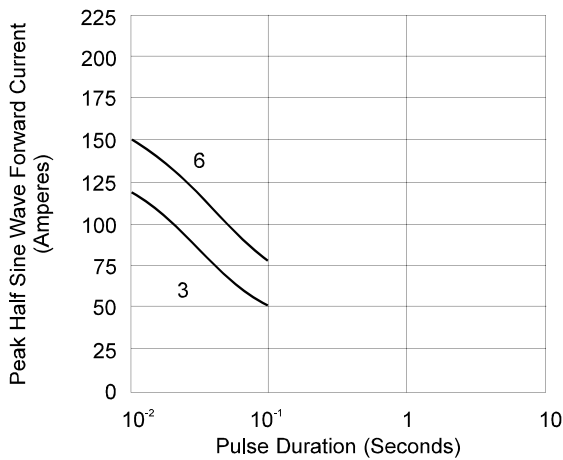


Fig. 3 - Maximum Non Recurrent Surge Current

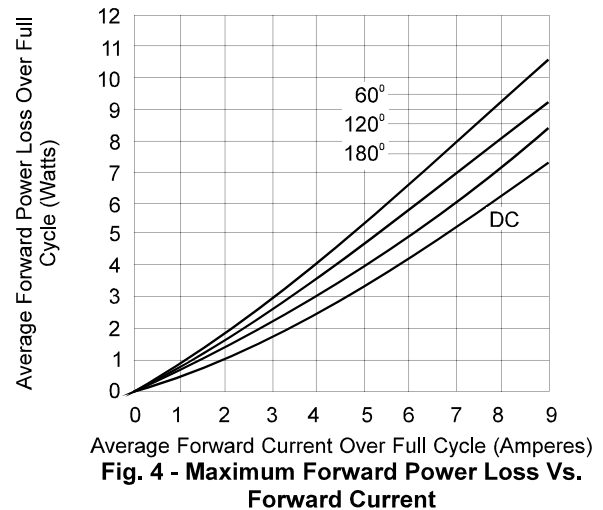


Fig. 4 - Maximum Forward Power Loss Vs. Forward Current

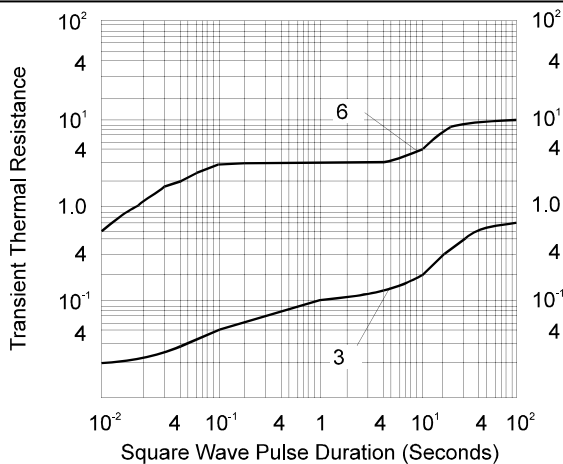


Fig. 5 - Transient Thermal Impedance

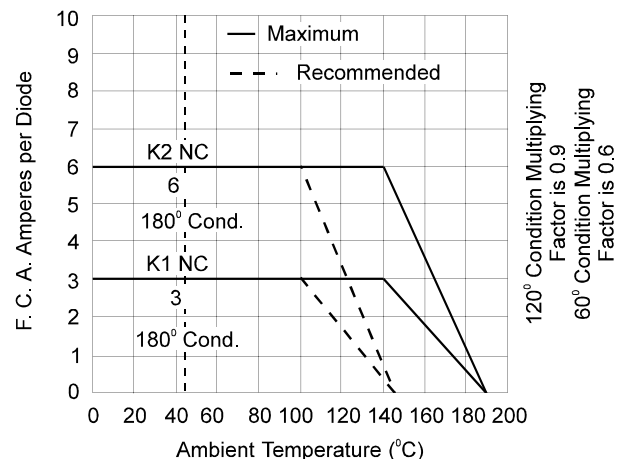
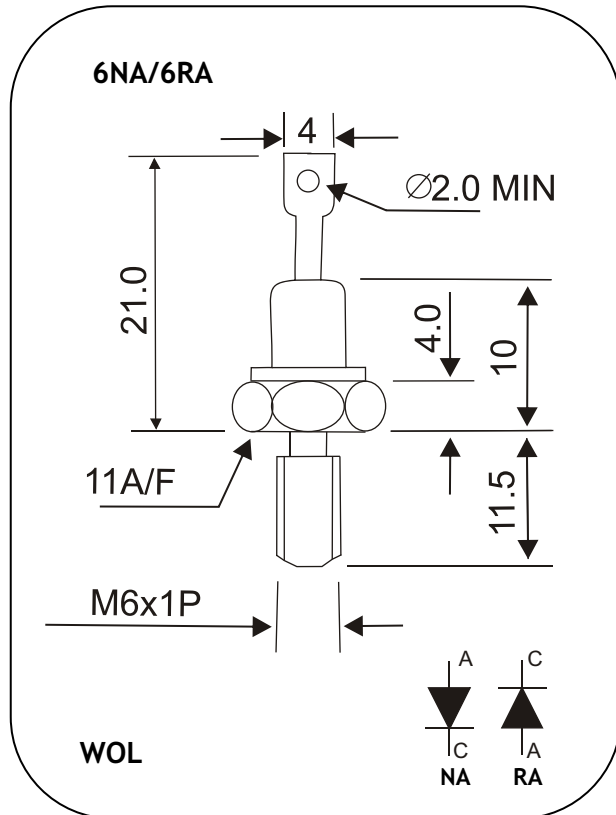
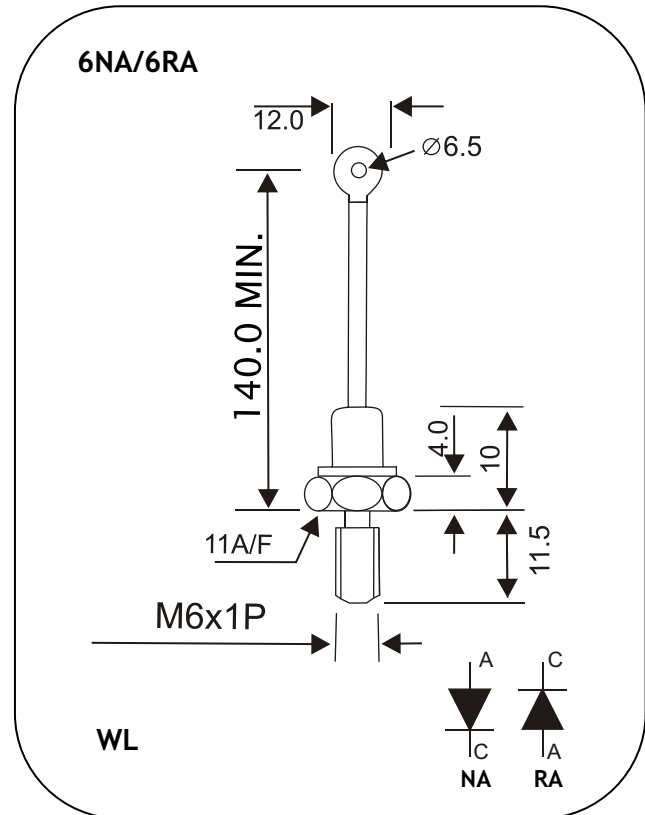


Fig. 6 - Diode Mounted on Heat Sink Type K2 with θ_{HA} 4.5° C / W for 6NA/RA

PACKAGE OUTLINE



All dimensions are in mm.

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