

POWER DIODE 16NA/16RA



DO4

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

POWER DIODE
16NA/16RA



TECHNICAL DATA

DEVICE TYPE

V_{RRM}
(V)

V_{RSM}
(V)

16NA/RA40	400	500
16NA/RA120	1200	1300
16NA/RA160	1600	1700

SYMBOL	CONDITIONS	VALUES
$I_{F(AV)}$	Maximum average forward Current TC = 160°C	16A
V_{FM}	Maximum peak forward Voltage drop @ Rated $I_{F(Peak)}$	1.20 V
I_{FSM}	Maximum peak one cycle (non-rep.) surge current 10 msec	350 A
I^2t	Max. I^2t rating (non-rep.) for 10 msec	612 A ² Sec
I_{RRM}	Peak reverse current at $T_{vj} = 175^{\circ}C$	4 mA
V_0 R_0	$T_{vj} = \text{max}$ $T_{vj} = \text{max}$	0.80 V 12 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	1.6°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

POWER DIODE 16NA/16RA

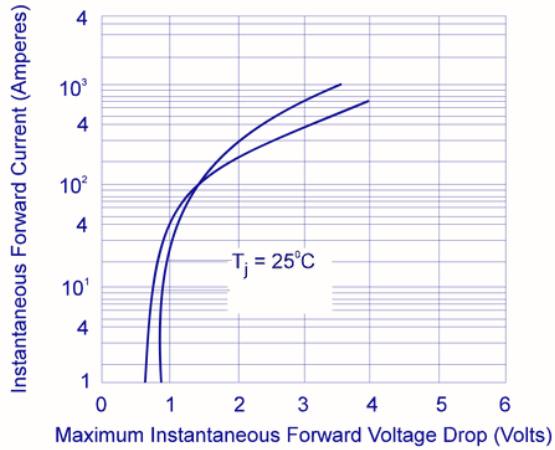


FIG. 1 forward voltage vs. forward current

FIG. 2 average forward current vs. case temperature

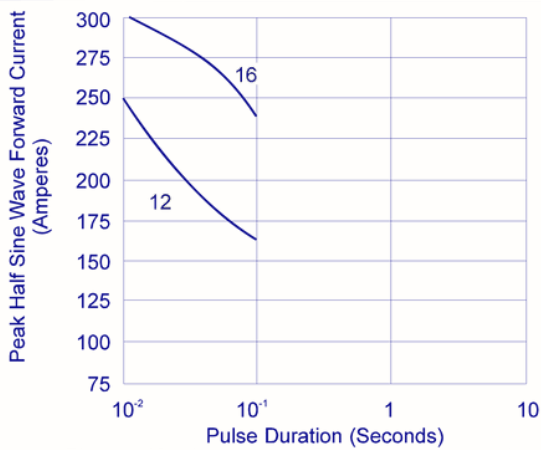
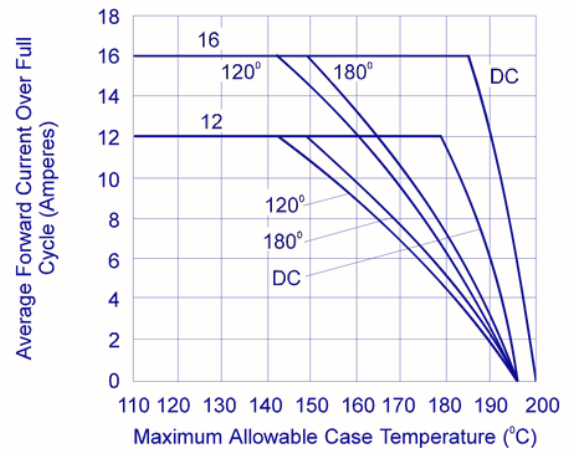


FIG. 3 maximum non recurrent surge current

POWER DIODE 16NA/16RA

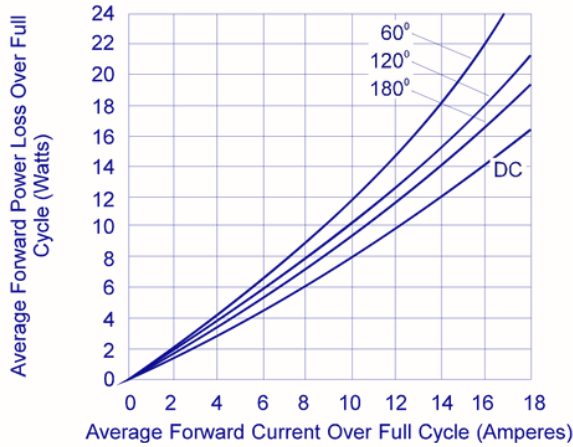


FIG. 4 maximum forward power loss vs. forward current

FIG. 5 transient thermal impedance

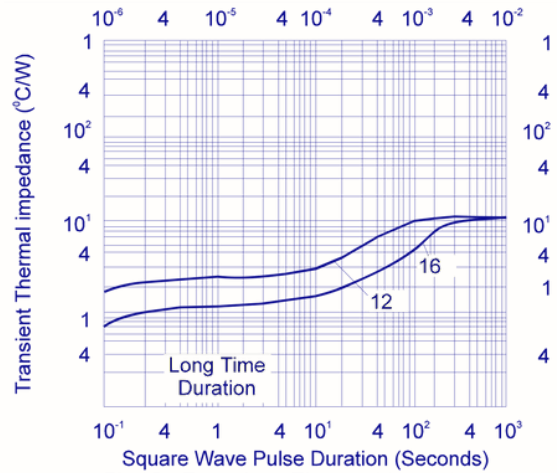
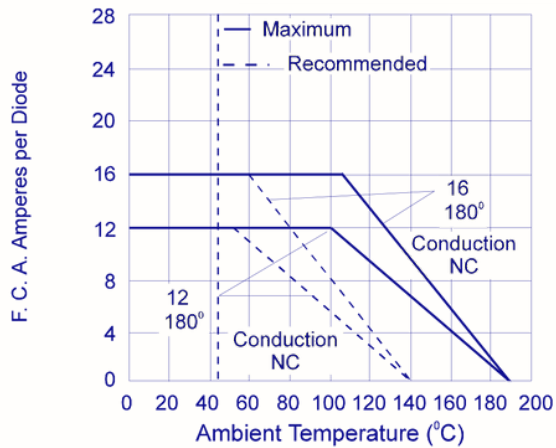


FIG. 6 diode mounted on heat sink
type K2 with θ_{HA} 4.5°C/W,
12W, 4.0°C/W16

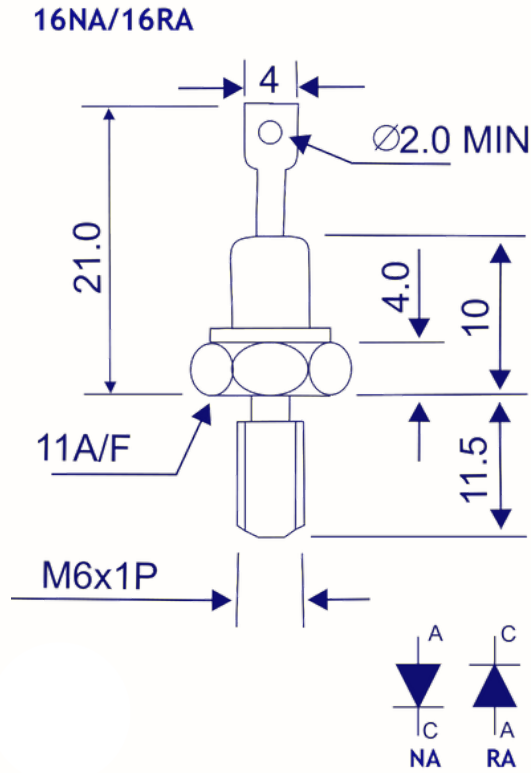


POWER DIODE
16NA/16RA

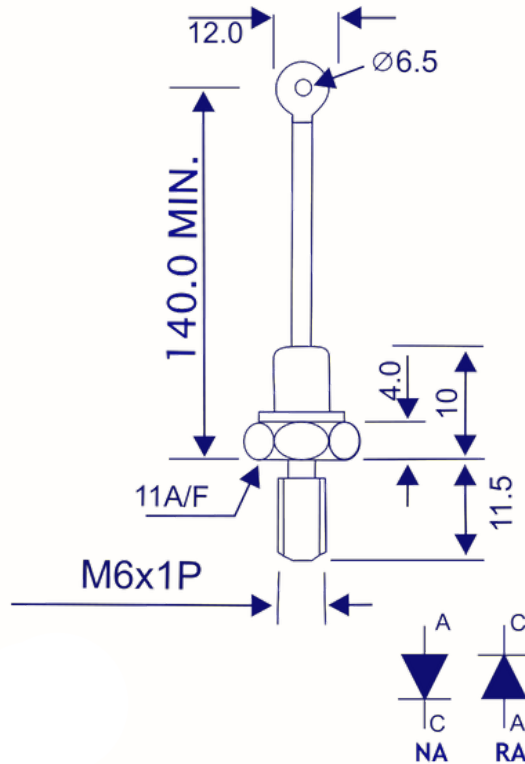


PACKAGE OUTLINE

WOL



WL



all dimensions in mm