

## POWER DIODE

# 400NG/RG, 400NF/RF

### FEATURES

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



STUD

FLAT

# DO9

### TYPICAL APPLICATIONS

- 👉 Power Supplies
- 👉 Machine Tool Controls
- 👉 Battery Chargers
- 👉 Welders

## POWER DIODE

**400NG/RG,  
400NF/RF**



### TECHNICAL DATA

#### DEVICE TYPE

$V_{RRM}$   
(V)

$V_{RSM}$   
(V)

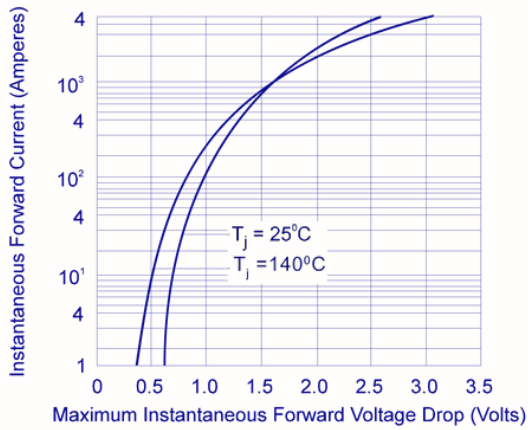
400NG/RG40 400NF/RF40	400	500
400NG/RG120 400NF/RF120	1200	1300
400NG/RG160 400NF/RF160	1600	1700

SYMBOL	CONDITIONS	VALUES
$I_{F(AV)}$	Maximum average forward Current $T_c = 125^{\circ}C$	400A
$V_{FM}$	Maximum peak forward Voltage drop @ Rated $I_F$ (Peak)	1.62 V
$I_{FSM}$	Maximum peak one cycle (non-rep.) surge current 10 msec	8250 A
$I^2t$	Max. $I^2t$ rating (non-rep.) for 10 msec	340000A <sup>2</sup> Sec
$I_{RRM}$	Peak reverse current at $T_{vj} = 150^{\circ}C$	50 mA
$V_0$ $R_0$	$T_{vj} = \max$ $T_{vj} = \max$	0.80 V 0.35 m
$R_{th(j-c)}$ $R_{th(c-h)}$ $R_{th(c-h)}$ $T_{vj}$ $T_{stg}$	Maximum thermal resistance ( Junction to case) Maximum thermal resistance ( Case to heat sink)(NG,RG) Maximum thermal resistance ( Case to heat sink)(NF,RF) Junction temperature Storage temperature	0.12 qC/W 0.08 qC/W 0.02 qC/W 180 qC 200 qC
Mounting torque		30 Nm
Weight	Approx.	330 gms
Package Outline		G,F

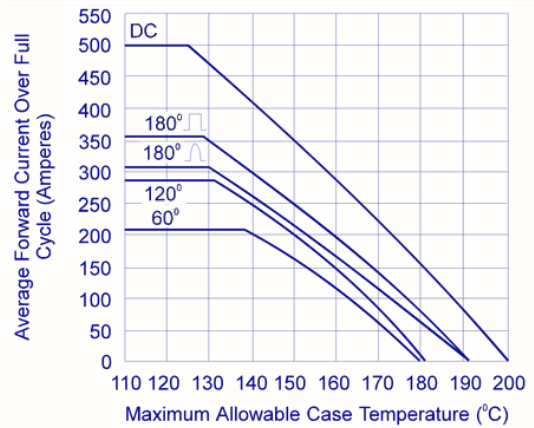
**POWER DIODE**  
**400NG/RG,**  
**400NF/RF**



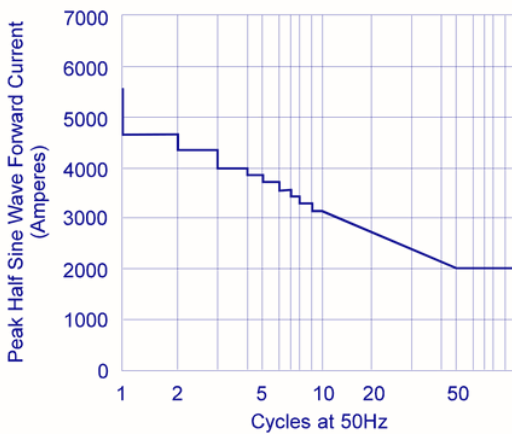
**FIG. 1** forward voltage drop vs. forward current



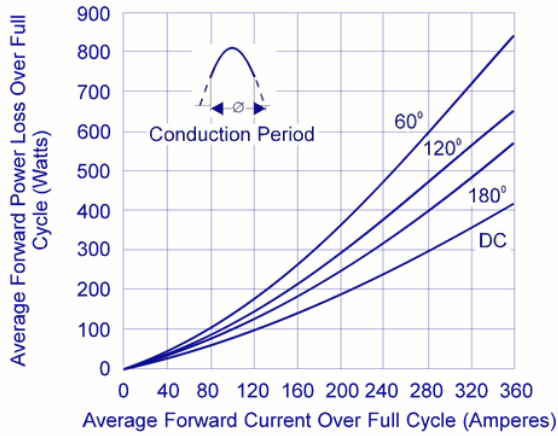
**FIG. 2** average forward current vs. case temperature



**FIG. 3** maximum non recurrent surge current

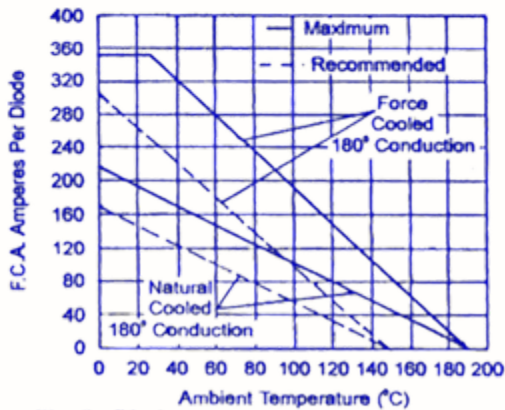
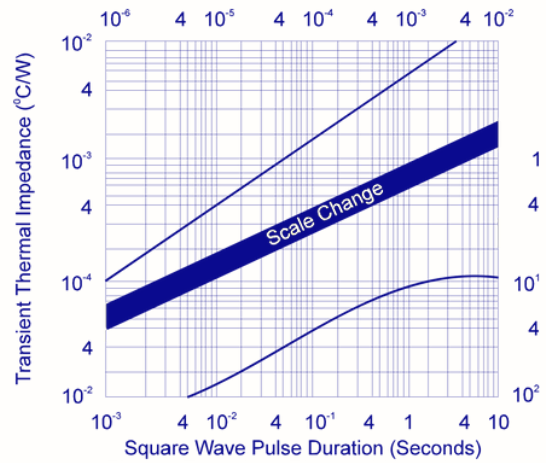


**POWER DIODE**  
**400NG/RG,**  
**400NF/RF**



**FIG. 4** maximum forward power loss vs. forward current

**FIG. 5** transient thermal impedance



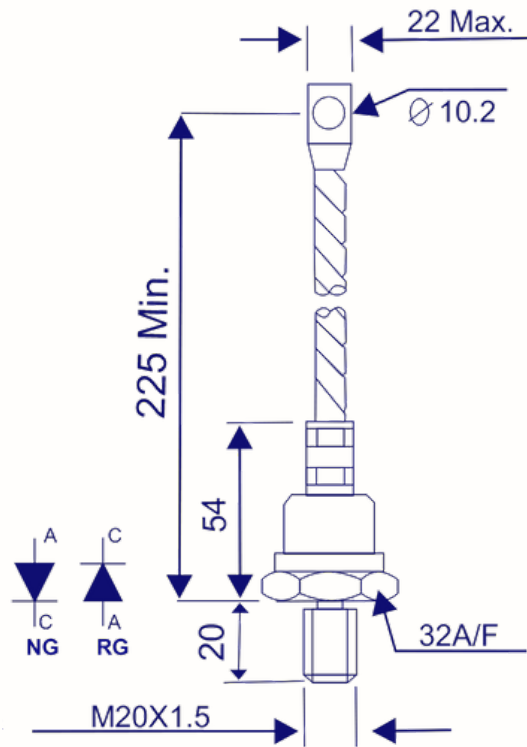
**FIG. 6** diode 350NG/RG mounted on heat sink  
type K5 with  $\theta_{HA-NC}$  0.55°  
C/W, FC 0.13° C/W

**POWER DIODE**  
**400NG/RG,**  
**400NF/RF**

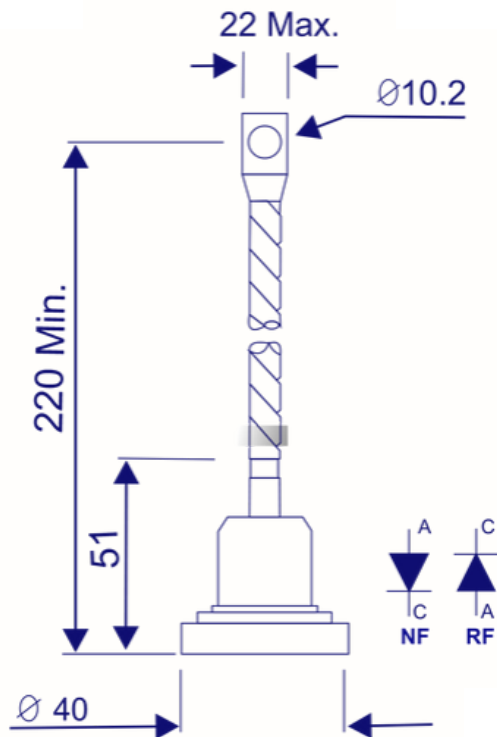


PACKAGE OUTLINE

**400NG/400RG**



**400NF, 400RF**



all dimensions in mm