

## POWER DIODE

# 200ND/RD, 200NE/RE

### FEATURES

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



**STUD**

**FLAT**

# DO8

### TYPICAL APPLICATIONS

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

## POWER DIODE

**200ND/RD,  
200NE/RE**



### TECHNICAL DATA

#### DEVICE TYPE

$V_{RRM}$   
(V)

$V_{RSM}$   
(V)

200ND/RD40 200NE/RE40	400	500
200ND/RD120 200NE/RE120	1200	1300
200ND/RD160 200NE/RE160	1600	1700

SYMBOL	CONDITIONS	VALUES
$I_{F(AV)}$	Maximum average forward Current $T_c = 130^{\circ}C$	200A
$V_{FM}$	Maximum peak forward Voltage drop @ Rated $I_{F(Peak)}$	1.35 V
$I_{FSM}$	Maximum peak one cycle (non-rep.) surge current 10 msec	3650 A
$I^2t$	Max. $I^2t$ rating (non-rep.) for 10 msec	66600 A <sup>2</sup> Sec
$I_{RRM}$	Peak reverse current at $T_{vj} = 175^{\circ}C$	22 mA
$V_0$ $R_0$	$T_{vj} = \max$ $T_{vj} = \max$	0.81 V 0.84 m $\Omega$
$R_{th(j-c)}$ $R_{th(c-h)}$ $R_{th(c-h)}$ $T_{vj}$ $T_{stg}$	Maximum thermal resistance ( Junction to case) Maximum thermal resistance ( Case to heat sink)(ND,RD) Maximum thermal resistance ( Case to heat sink)(NE,RE) Junction temperature Storage temperature	0.25 $^{\circ}C/W$ 0.10 $^{\circ}C/W$ 0.07 $^{\circ}C/W$ 200 $^{\circ}C$ 200 $^{\circ}C$
Mounting torque		10 Nm
Weight	Approx.	150 gms
Package Outline		D,E

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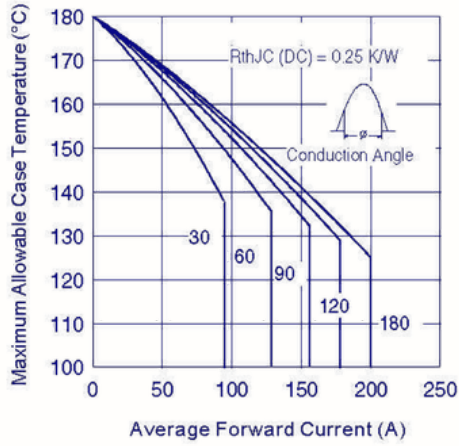


FIG. 1 current ratings characteristics

FIG. 2 current ratings characteristics

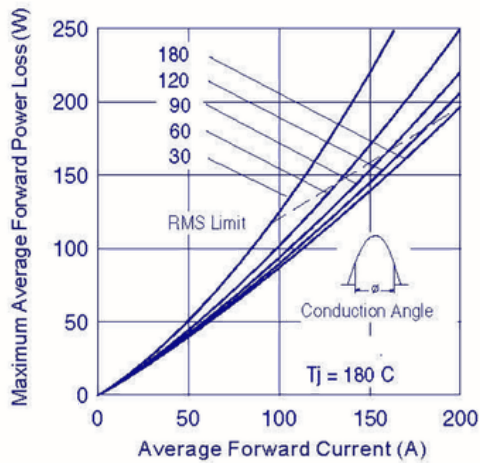
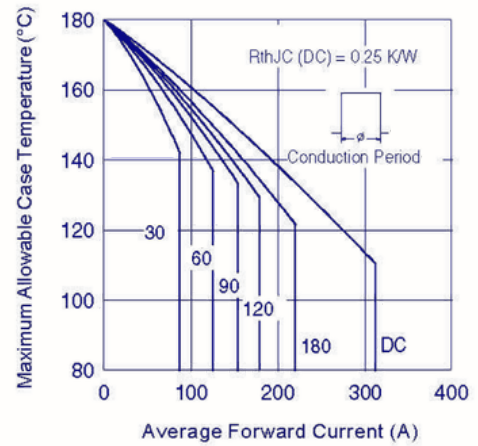


FIG. 3 forward power loss characteristics

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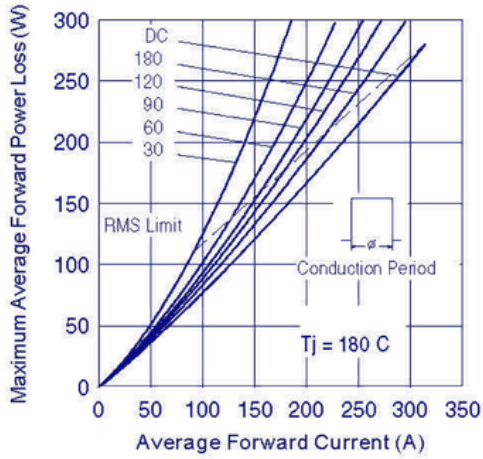
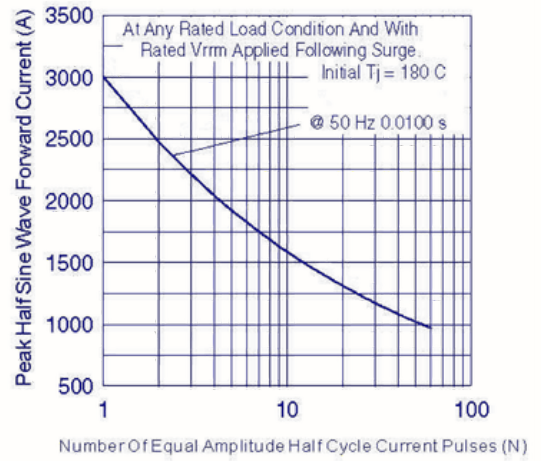


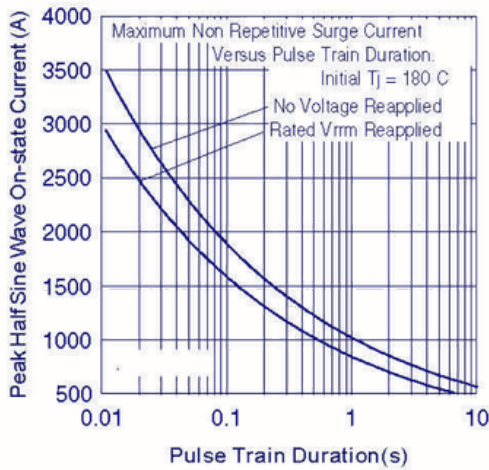
Fig. 4- Forward Power Loss Characteristics

**FIG. 4** forward power loss characteristics

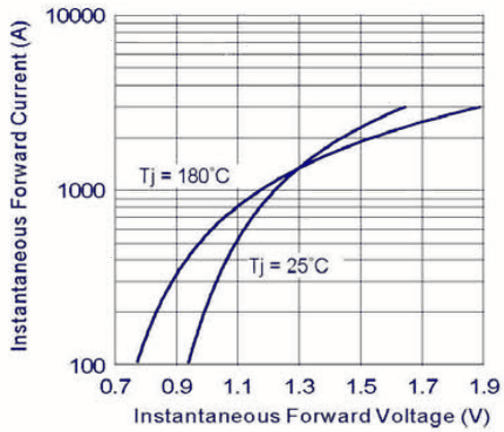
**FIG. 5** maximum non-repetitive surge current



**FIG. 6** maximum non-repetitive surge current

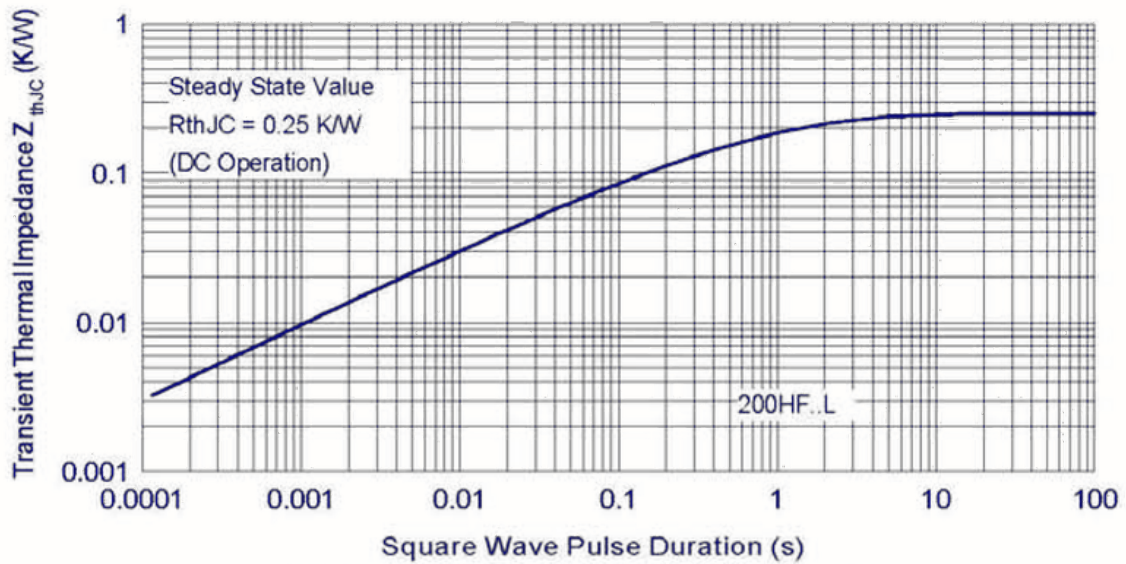


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**FIG. 7** forward voltage drop characteristics

**FIG. 8** thermal impedance  $z_{thjc}$  characteristic

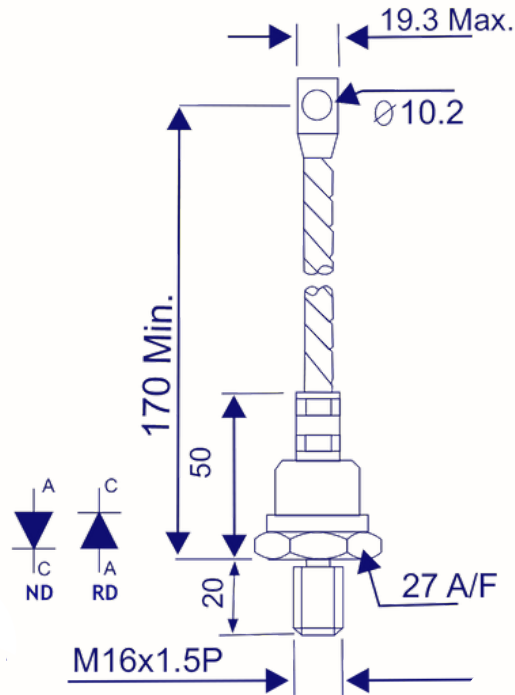


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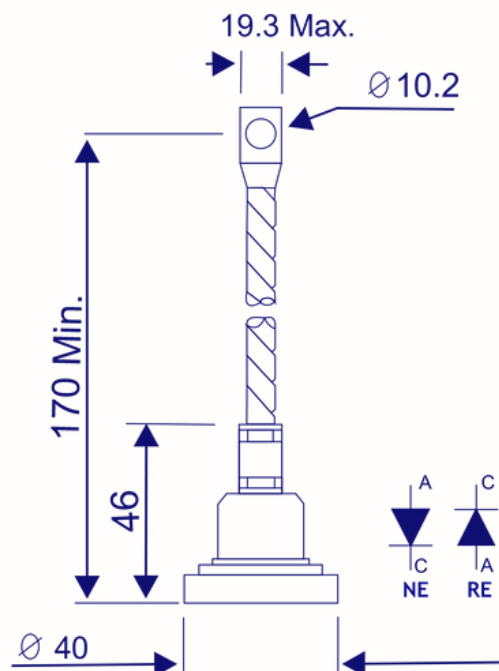


PACKAGE OUTLINE

200ND/200RD



200NE/200RE



all dimensions in mm