

## Features

- Full blocking capability over wide temperature range
- Hermetic metal case with glass insulator
- Flat base

## Applications

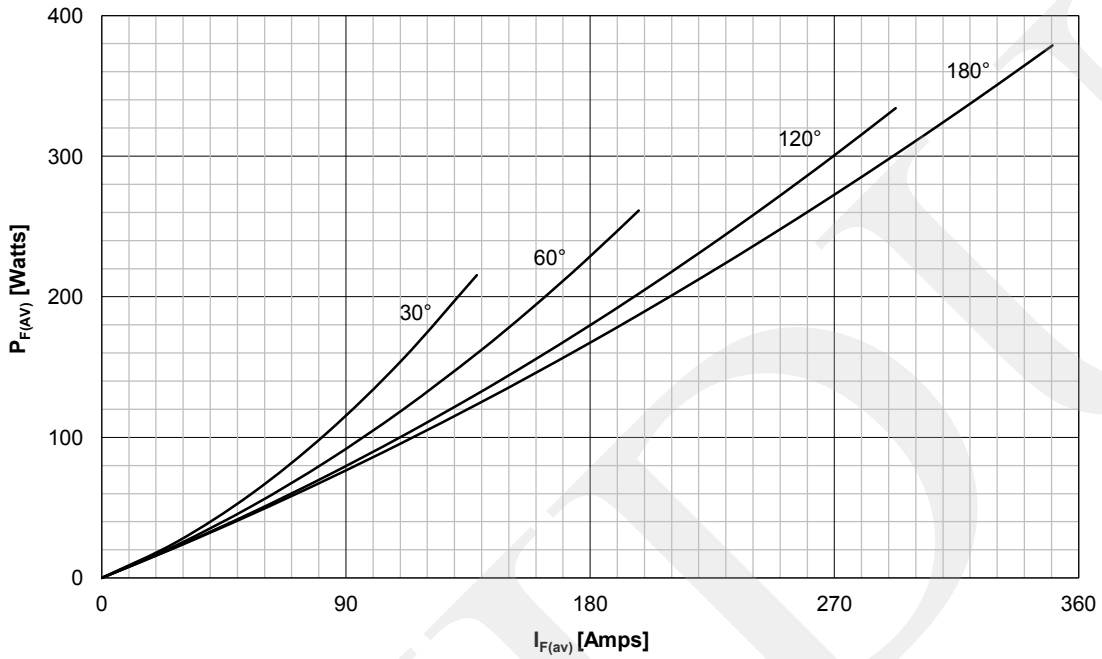
- Power Supplies
- Free-wheeling Diodes
- Uncontrolled Rectifiers

## Key Parameters

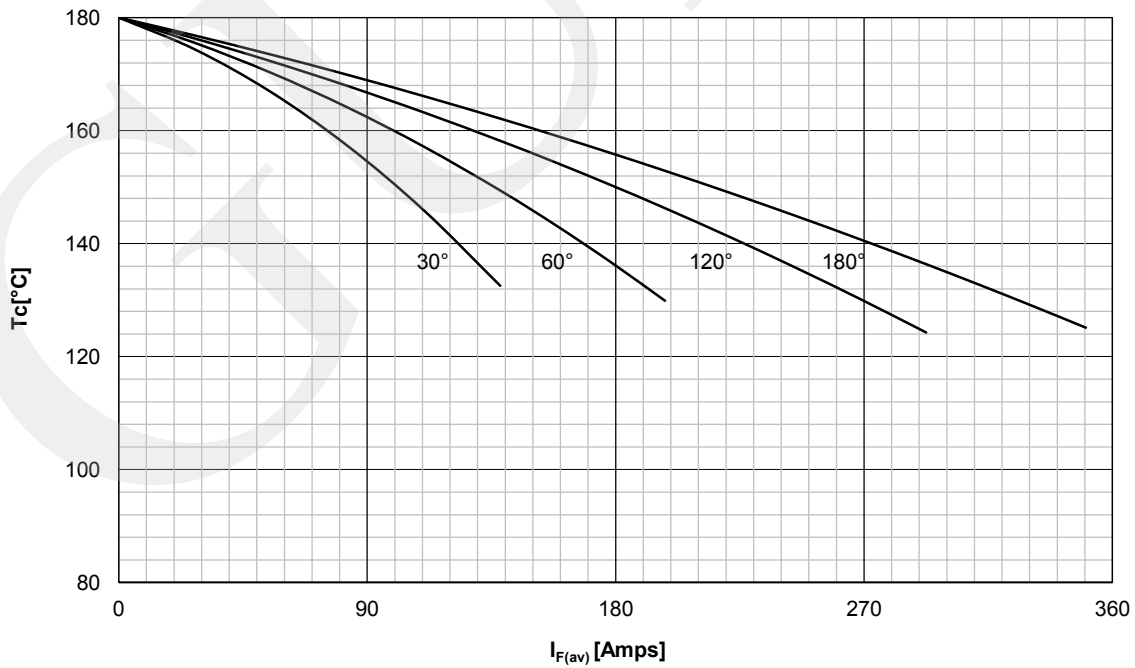
$V_{RRM}$	= 1600V
$I_{F(AV)}$	= 350A
$I_{FSM}$	= 6400A
$V_{F(TO)}$	= 0.77V
$r_F$	= 0.36mΩ

Symbol	Characteristic	Conditions	T <sub>J</sub> [°C]	Value	Unit
<b>BLOCKING</b>					
$V_{RRM}$	Repetitive peak reverse voltage		180	200 - 1600	V
$I_{RRM}$	Repetitive peak reverse current	$V = V_{RRM}$	180	50	mA
<b>CONDUCTING</b>					
$I_{F(AV)}$	Mean Forward current	180° sin ,50 Hz, T <sub>c</sub> =125°C		350	A
$I_{FRMS}$	RMS Forward current			550	A
$I_{FSM}$	Surge Forward current	Sine wave, 10 ms Without reverse voltage	25	6400	A
			180	6000	A
$I^2 t$	$I^2 t$	Sine wave, 10 ms Without reverse voltage	25	205 x 10 <sup>3</sup>	A <sup>2</sup> s
			180	180 x 10 <sup>3</sup>	A <sup>2</sup> s
$V_F$	Peak Forward voltage	Peak forward current = 1050A	180	1.15	V
$V_{F(TO)}$	Threshold voltage		180	0.77	V
$r_F$	Forward slope resistance		180	0.36	mΩ
<b>MOUNTING</b>					
$R_{th(j-c)}$	Thermal impedance, sin 180°	Junction to case		0.145	°C/W
$R_{th(c-h)}$	Thermal impedance	Case to heatsink		0.02	°C/W
$T_j$	Max. junction temperature			180	°C
$T_{stg}$	Storage temperature			-40 .... 180	°C
$M$	Mounting Torque			20	NM
$W$	Weight (Approx.)			350	gm

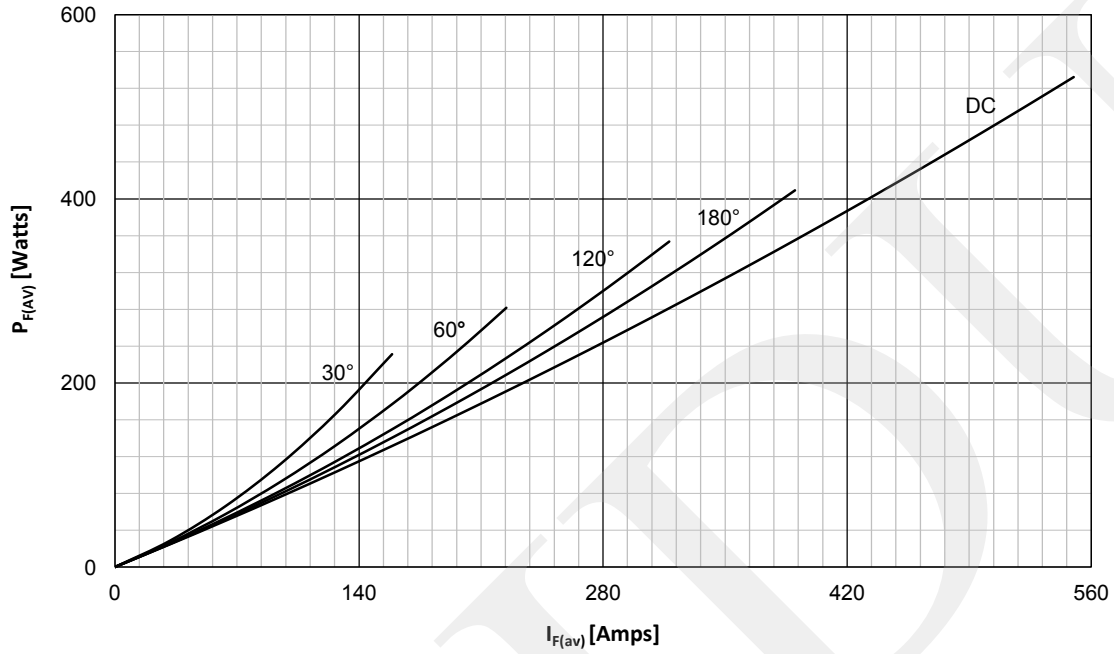
DISSIPATION CHARACTERISTICS  
SINE WAVE



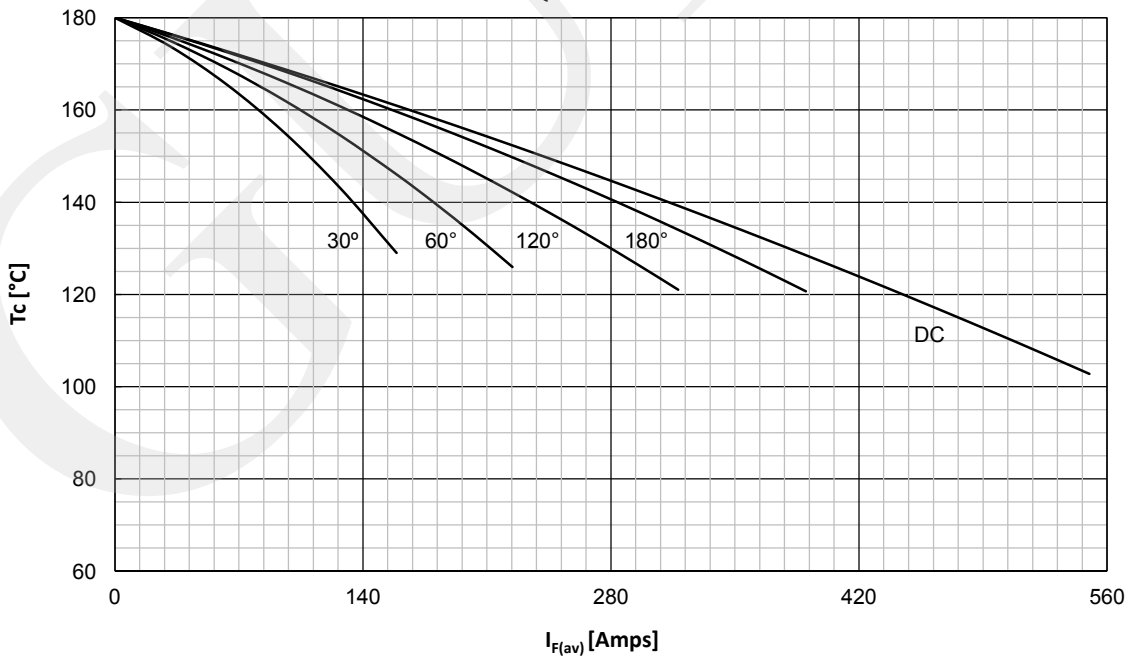
FORWARD CURRENT DERATING CURVE  
SINE WAVE



DISSIPATION CHARACTERISTICS  
SQUARE WAVE

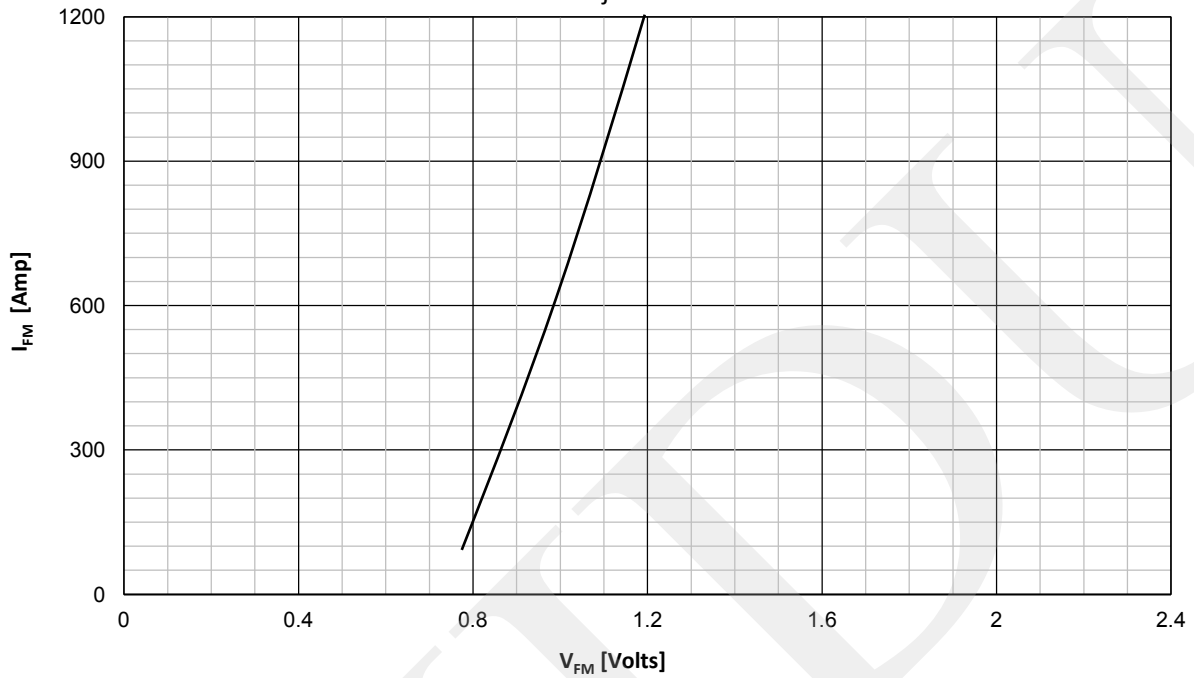


FORWARD CURRENT DERATING CURVE  
SQUARE WAVE

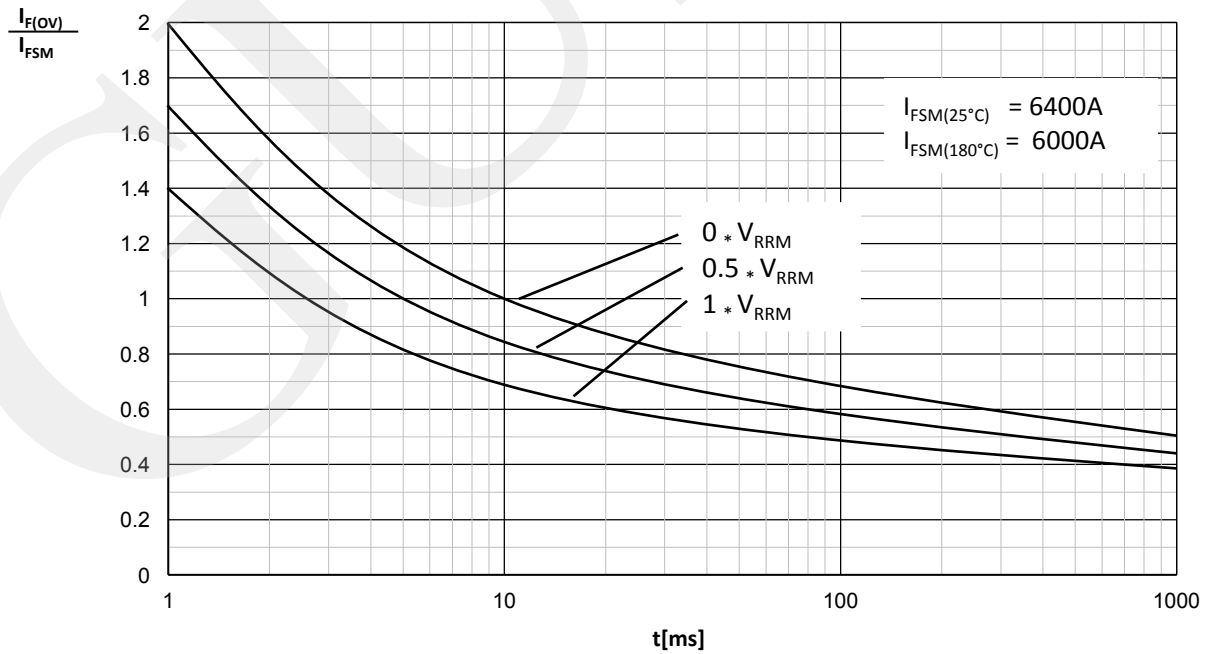


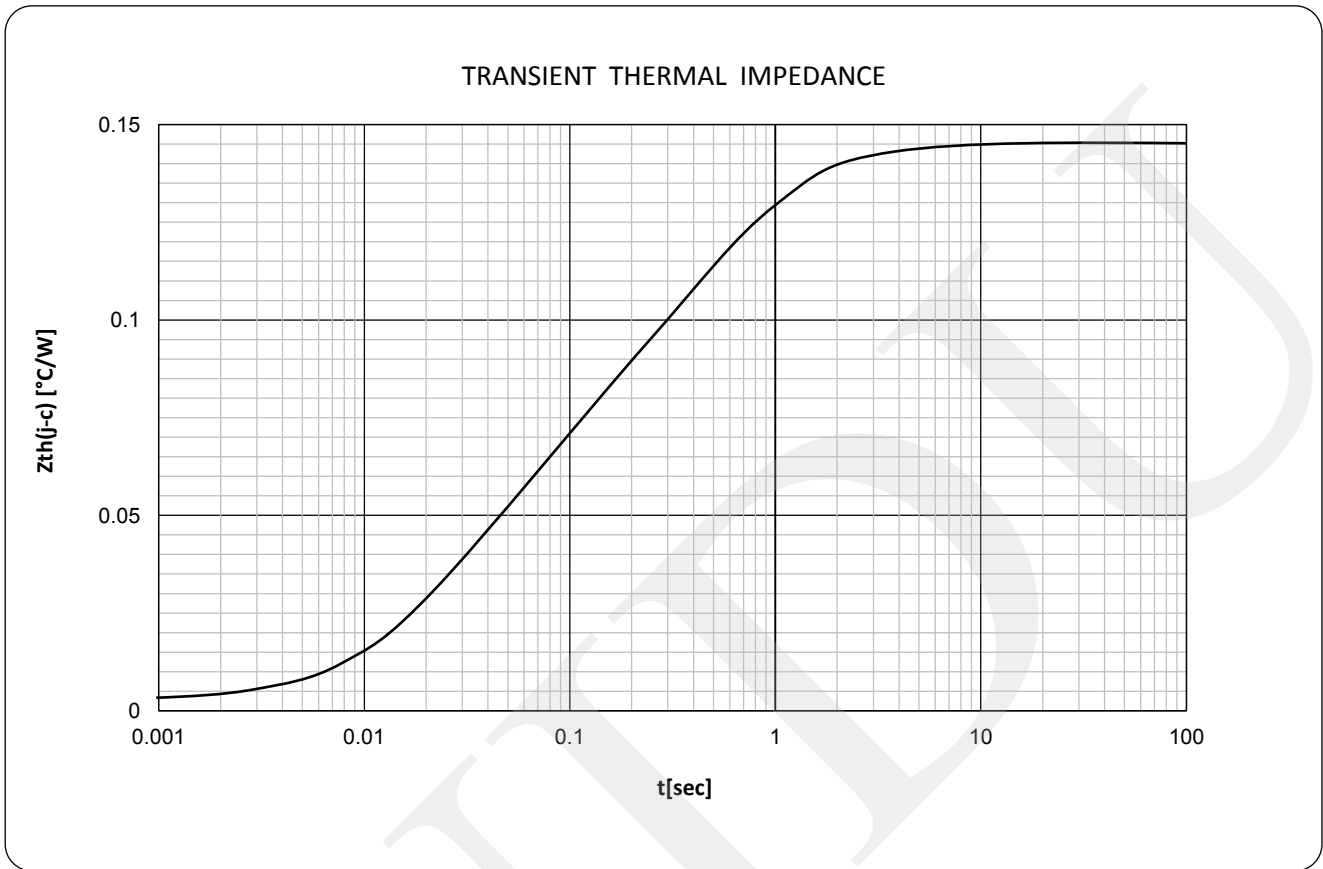
FORWARD CHARACTERISTICS

$T_j = 180^\circ\text{C}$



SURGE CHARACTERISTICS





**ORDERING INFORMATION**

<b>GDZP</b>	<b>350</b>	<b>N</b>	<b>XX</b>	<b>F</b>
Rectifier Diode	Current code	Polarity R= Base Anode N= Base Cathode	Voltage Code Code X 100 = $V_{RRM}$	F = Flat base

Order Code GDZP350R16F – 1600V  $V_{RRM}$ , Flat base, Diode with base anode.

Outline

