



Key Parameters

V_{RRM}	= 1600V
$I_{F(AV)}$	= 165A
I_{FSM}	= 2500A
$V_{F(TO)}$	= 0.85V
r_F	= 1.3mΩ

Features

- Full blocking capability over wide temperature range
- Hermetic metal case with glass insulator
- Threaded stud

Applications

- Power Supplies
- Uncontrolled Rectifiers
- Battery Chargers

Ordering Information

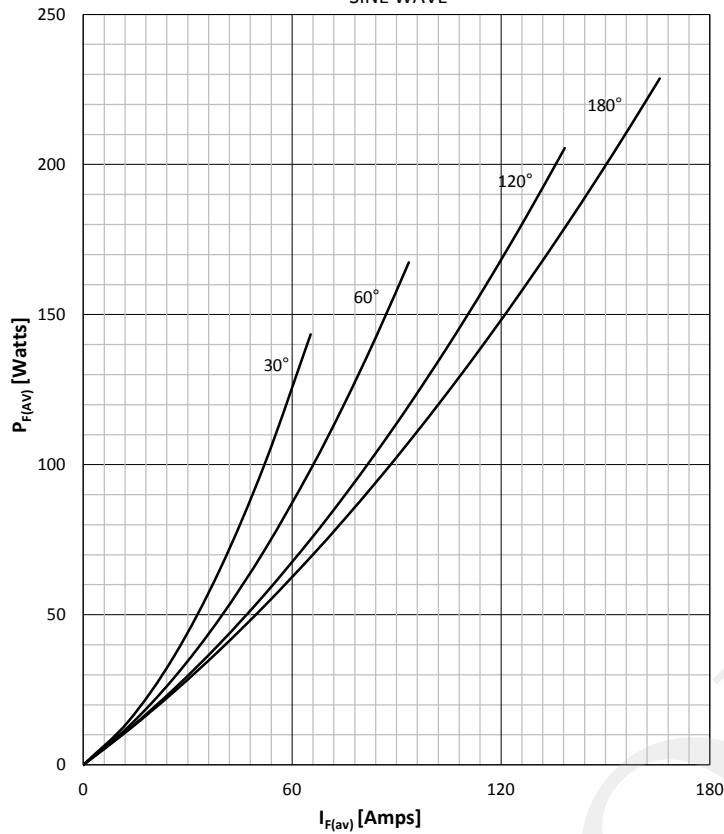
MSZP	130	N	XX	M
Rectifier Diode	Current code	Polarity R= Stud Anode N= Stud Cathode	Voltage Code Code X 100 = V_{RRM}	Stud Threads M = Stud M12 X 1.75 U = 1/2"-20UNF 2A
Order Code MSZP130N16M : 1600V V_{RRM} , Metric Stud, Diode with stud Cathode				

Prepared by : ABA	Date of Publication : 25.03.2015
Approved by : RBS	Revision : 0

Symbol	Characteristic	Conditions	T _j [°C]	Value	Unit
BLOCKING					
V _{RRM}	Repetitive peak reverse voltage		180	200 - 1600	V
V _{RSM}	Non-repetitive peak reverse voltage		180	300 - 1700	V
I _{RRM}	Repetitive peak reverse current	V = V _{RRM}	180	15	mA
CONDUCTING					
I _{F(AV)}	Mean forward current	180° sin ,50 Hz, T _c =100°C T _c =125°C		165 130	A
I _{FRMS}	RMS current			260	A
I _{FSM}	Surge forward current	Sine wave, 10 ms Without reverse voltage	25	2500	A
			180	2000	A
I ² t	I ² t	Sine wave, 10 ms Without reverse voltage	25	31250	A ² s
			180	20000	A ² s
V _F	Forward voltage	On-state current = 520A	180	1.53	V
V _{F(TO)}	Threshold voltage		180	0.85	V
r _F	Forward slope resistance		180	1.3	mΩ
MOUNTING					
R _{th(j-c)}	Thermal impedance, sin 180°	Junction to case		0.35	°C/W
R _{th(c-h)}	Thermal impedance	Case to heatsink		0.08	°C/W
T _j	Max. junction temperature			180	°C
T _{stg}	Storage temperature			-40 180	°C
M	Mounting torque			10 - 13	NM
W	Weight (Approx.)			110	gm
			Prepared by : ABA	Date of Publication : 25.03.2015	
			Approved by : RBS	Revision : 0	

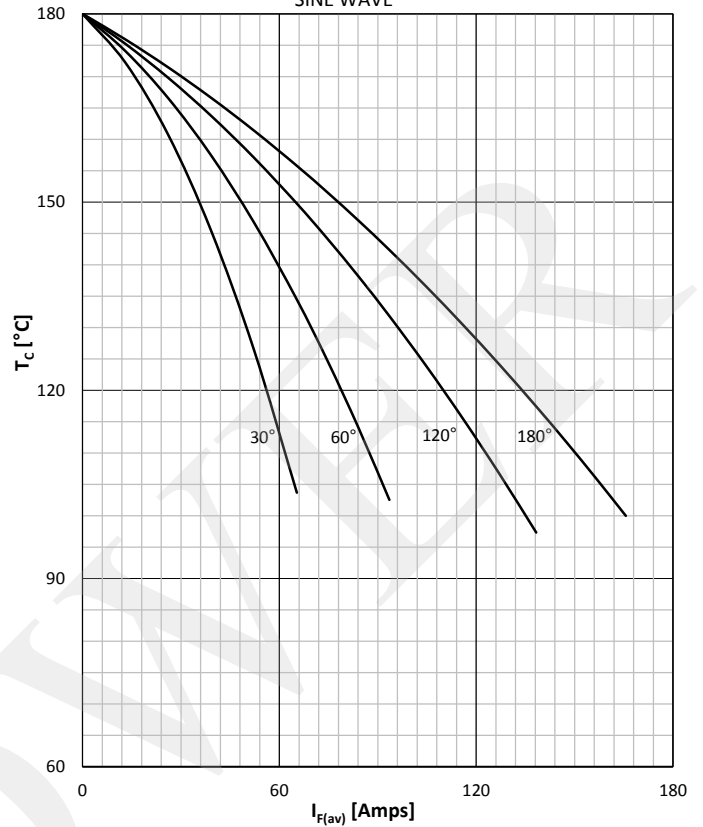
DISSIPATION CHARACTERISTICS

SINE WAVE



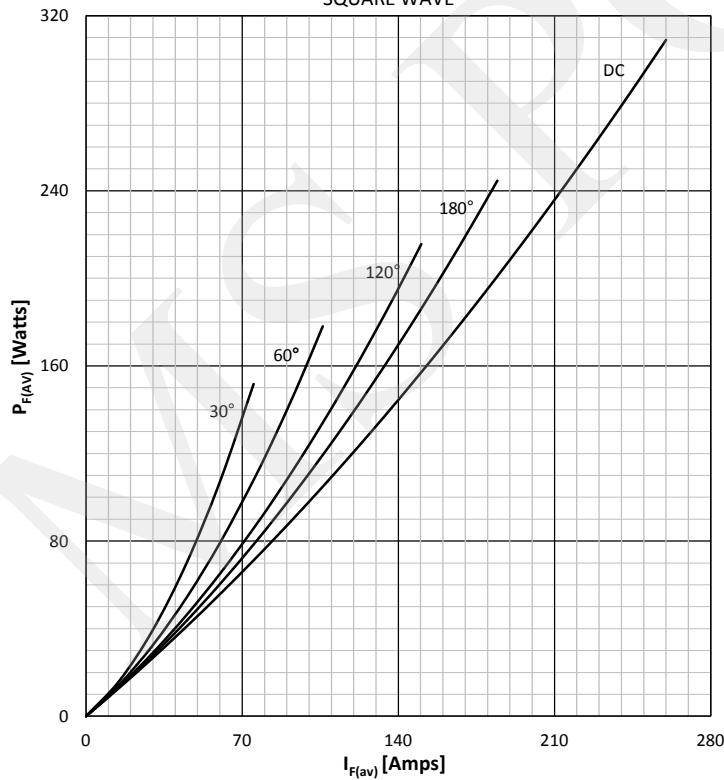
FORWARD CURRENT DERATING CURVE

SINE WAVE



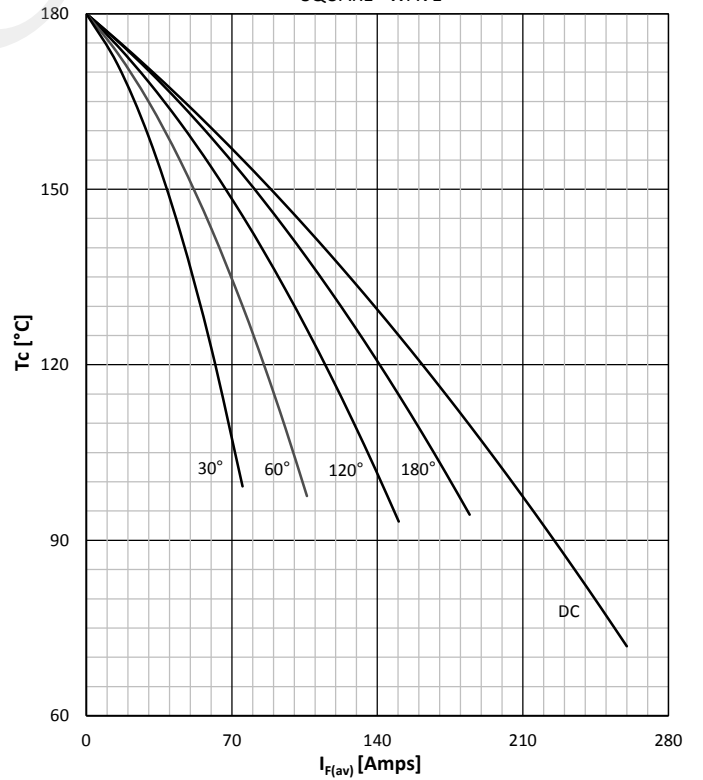
DISSIPATION CHARACTERISTICS

SQUARE WAVE



FORWARD CURRENT DERATING CURVE

SQUARE WAVE



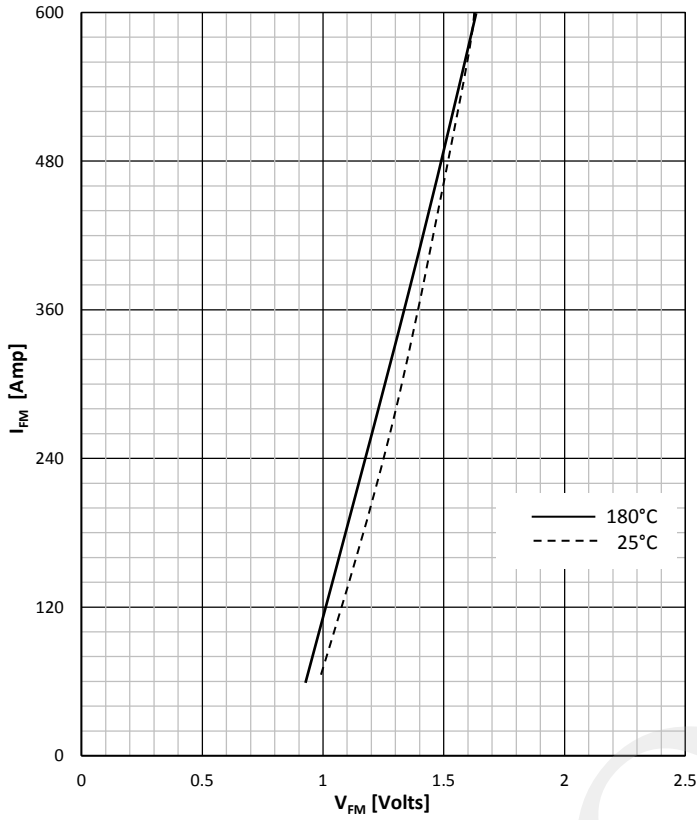
Prepared by : ABA

Date of Publication : 25.03.2015

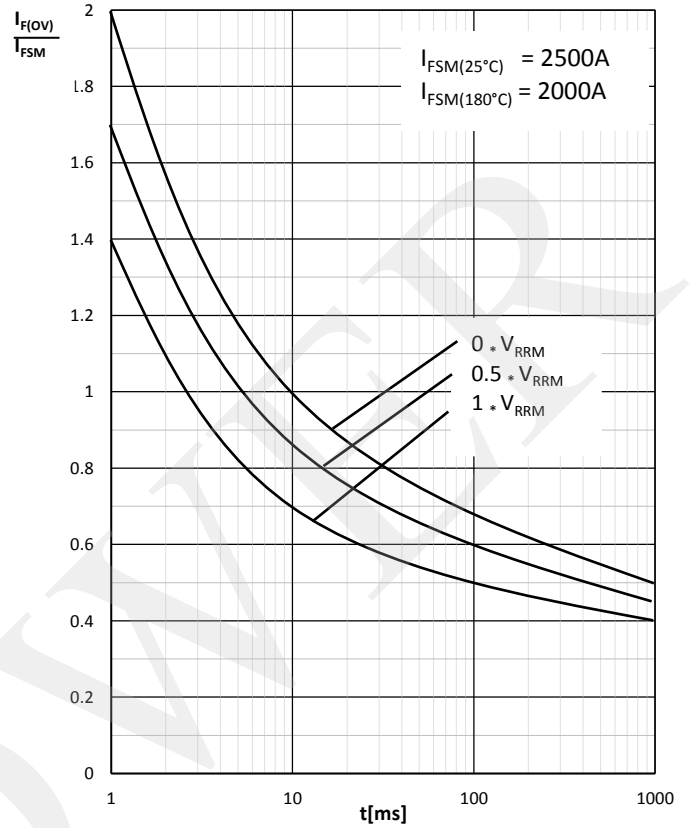
Approved by : RBS

Revision : 0

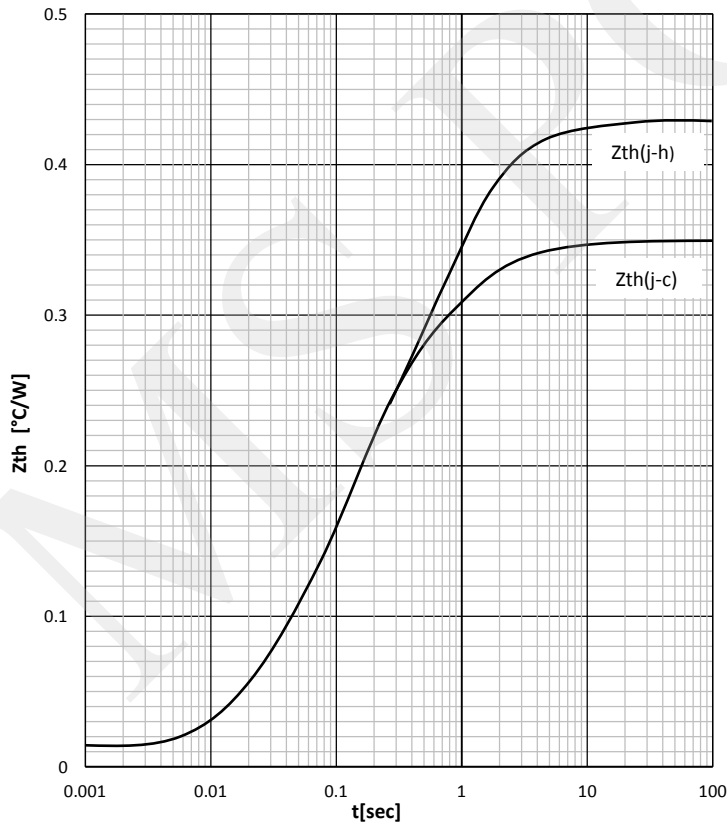
FORWARD CHARACTERISTIC



SURGE CHARACTERISTICS

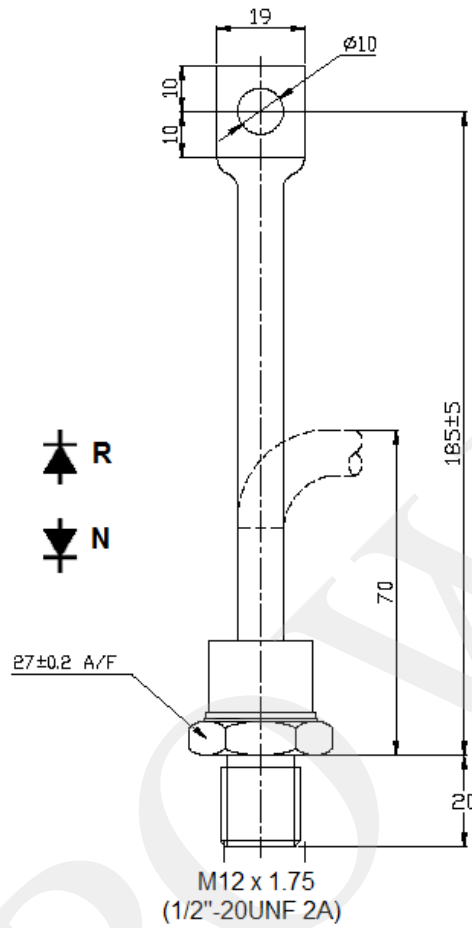


TRANSIENT THERMAL IMPEDANCE



Prepared by : ABA	Date of Publication : 25.03.2015
Approved by : RBS	Revision : 0

Outline



MS Power GmbH
Mergenthalerallee 23A
65760 Eschborn, Deutschland
E-mail : info@mspowergroup.de

www.mspowergroup.com

Prepared by : ABA

Date of Publication : 25.03.2015

Approved by : RBS

Revision : 0

Terms & Conditions of usage :

The data contained in this product datasheet is exclusively Intended for technically trained staff. You and your technical departments will have to evaluate the suitability of the product for the intended application and the completeness of the product data with respect to such application. This product datasheet is describing the characteristics of this product for which a warranty is granted. Any such warranty is granted exclusively pursuant the terms and conditions of the supply agreement. There will be no guarantee of any kind for the product and its characteristics. The information in the valid application-and assembly notes of the device must be considered.

Should you require product information in excess of the data given in this product datasheet or which concerns the specific application of our product, please contact the sales office, which is responsible for you (see www.mspowergroup.com). For those that are specifically interested we may provide application notes.

Due to technical requirements our product may contain dangerous substances. For information on the types in question please contact the sales office, which is responsible for you.

Should you intend to use the Product in aviation applications, in health or live endangering or life support applications, please notify. Please note, that for any such applications we urgently recommend

- to perform joint Risk and Quality Assessments;
- the conclusion of Quality Agreements;
- to establish joint measures of an ongoing product survey, and that we may make delivery depended on the realization of any such measures.

If and to the extent necessary, please forward equivalent notices to your customers.

Changes of this product datasheet are reserved.

Prepared by : ABA	Date of Publication : 25.03.2015
Approved by : RBS	Revision : 0