

## Rectifier Diode SXXHNS/HRS100

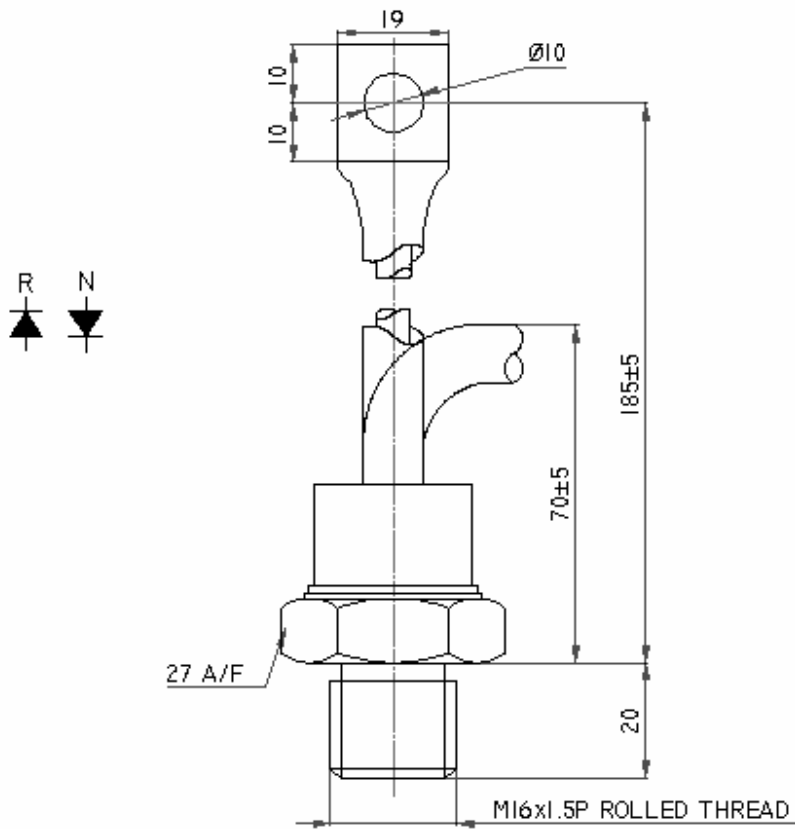
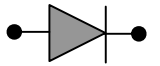


Symbol	Characteristics	Conditions	$T_J(^{\circ}\text{C})$	Value	Unit
<b>BLOCKING PARAMETERS</b>					
$V_{RRM}$	Repetitive peak reverse voltage		180	200-1500	V
$I_{RRM}$	Repetitive peak reverse current	$V = V_{RRM}$	180	20	mA
<b>CONDUCTING PARAMETERS</b>					
$I_{F(AV)}$	Average on-state current	180 sine, 50Hz, $T_C = 130^{\circ}\text{C}$		100	A
$I_{RMS}$	RMS on-state current			160	A
$I_{FSM}$	Non repetitive peak surge on-state current	Sine wave, 10mS without reverse voltage	180	2400	A
$I^2t$	Permissible surge energy			28.8	kJA <sup>2</sup> S
$V_{FM}$	Peak on-state voltage drop	On-state current = 300A	180	1.30	V
$V_0$	Typical forward conduction Threshold voltage		180	0.80	V
$r_0$	Typical forward slope resistance		180	1.22	m $\Omega$
<b>THERMAL &amp; MECHANICAL PARAMETERS</b>					
$R_{TH(J-C)}$	Thermal impedance, 180 <sup>o</sup> conduction, Sine	Junction to case		0.36	<sup>o</sup> C/W
$R_{TH(C-HK)}$	Thermal impedance	Case to heatsink		0.05	<sup>o</sup> C/W
$T_J$	Maximum Permissible junction temperature			180	<sup>o</sup> C
$T_{STG}$	Storage temperature range			-40 – 180	<sup>o</sup> C
F	Mounting Torque			13.5	NM
W	Weight			180	gms



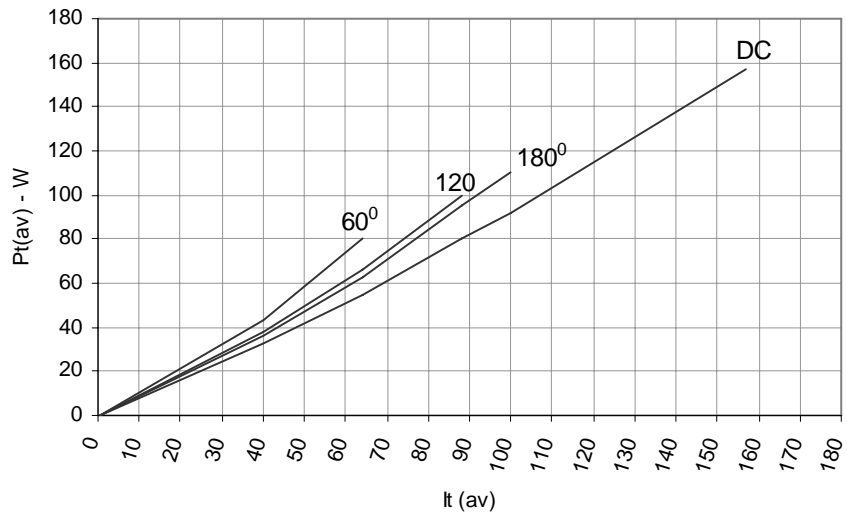
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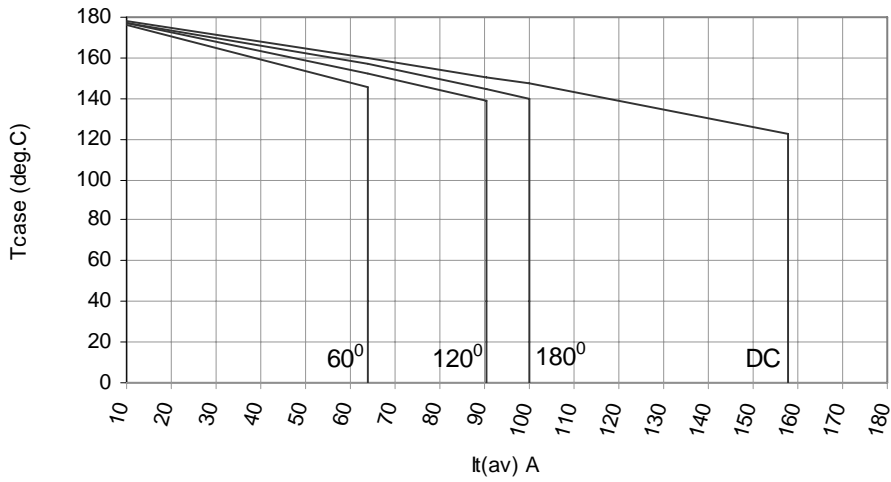
All dimensions in mm

## On State Power Loss

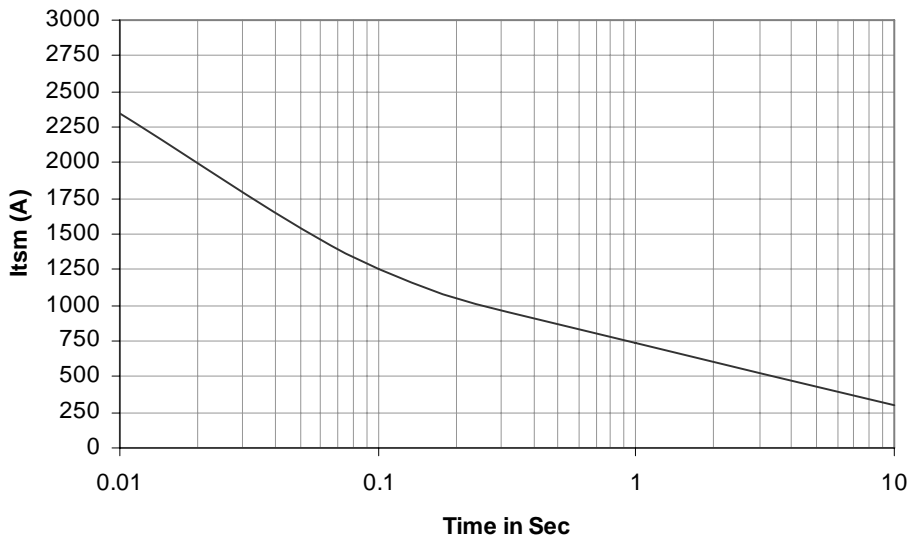


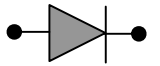


Maximum Permissible Case Temp

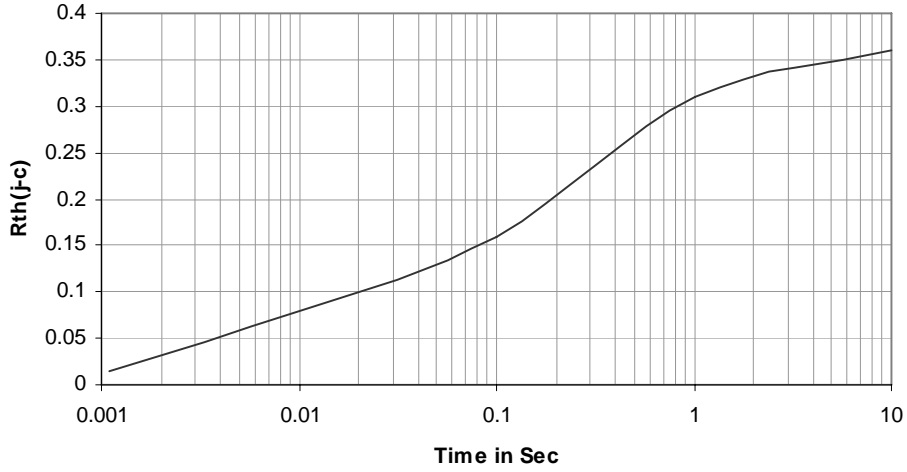


Max non repetitive Surge Current

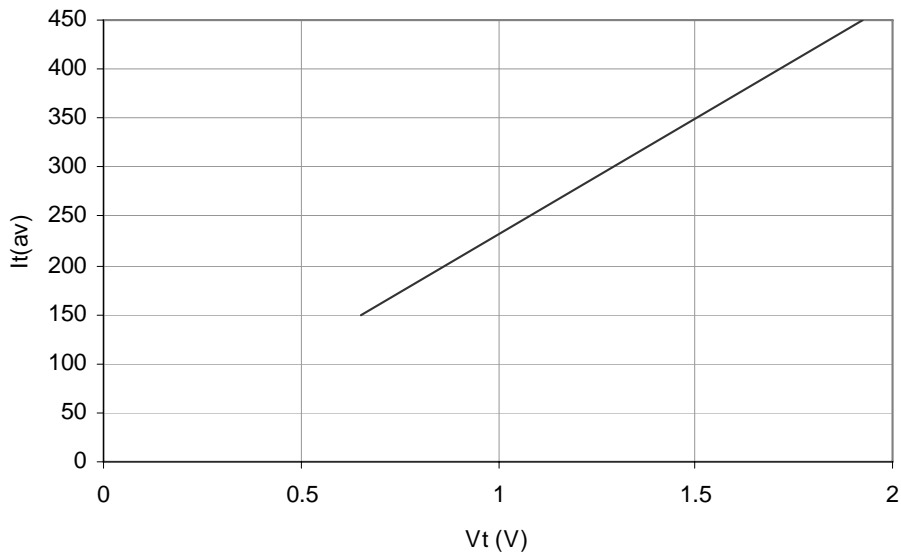




Transient Thermal Impedance Junction to Case



On State Characteristics



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### Ordering Information: -

<b>S</b>	<b>XX</b>	<b>HNS / HRS</b>	<b>100</b>
Hirect make Rectifier Diode	$V_{RRM} = XX * 100$ e.g. 12 * 100 = 1200V	HNS - Normal Polarity HRS - Reverse Polarity	$I_{F(AV)} = 100A$

Hind Rectifiers Ltd reserves the right to change the specifications without notice.

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