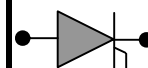


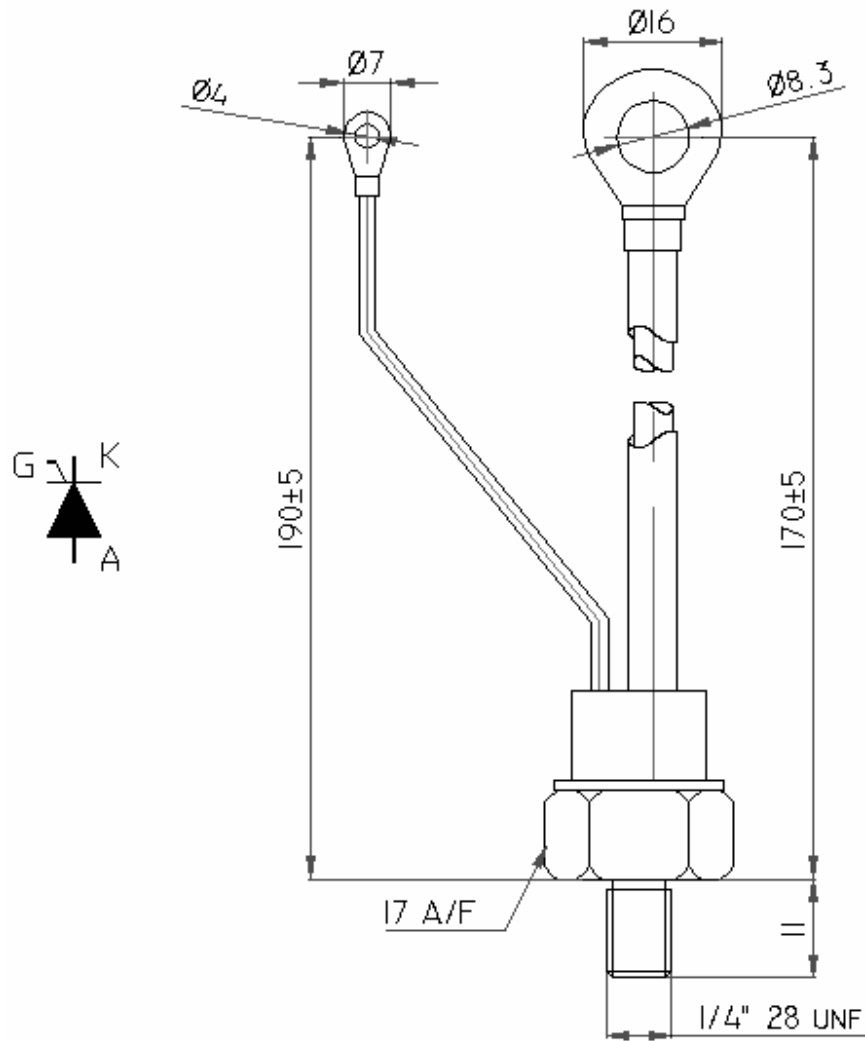
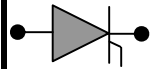
# PHASE CONTROL THYRISTOR H55TBXX



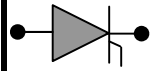
Symbol	Characteristics	Conditions	T <sub>J</sub> (°C)	Value	Unit
<b>BLOCKING PARAMETERS</b>					
V <sub>RRM</sub>	Repetitive peak reverse voltage		125	200-1600	V
V <sub>DRM</sub>	Repetitive peak off-stage voltage		125	200-1600	V
I <sub>RRM</sub>	Repetitive peak reverse current	V = V <sub>RRM</sub>	125	10	mA
I <sub>DRM</sub>	Repetitive peak off-state current	V = V <sub>RRM</sub>	125	10	mA
dV/dT	Rep. rate of change of voltage	@ 67%V <sub>DRM</sub>	125	600	V/μS
<b>CONDUCTING PARAMETERS</b>					
I <sub>F(AV)</sub>	Average on-state current	180 sine, 50Hz, T <sub>C</sub> = 75°C		55	A
I <sub>RMS</sub>	RMS on-state current			85	A
I <sub>TSM</sub>	Surge on-state current	Sine wave, 10mS without reverse voltage	125	900	A
I <sup>2</sup> t	I <sup>2</sup> t			4050	A <sup>2</sup> S
V <sub>T</sub>	Peak on-state voltage drop	On-state current = 175A	125	1.82	V
V <sub>0</sub>	Threshold voltage		125	0.90	V
R <sub>0</sub>	On-state slope resistance		125	4.35	mΩ
di/dt	Repetitive rate of rise of current	dI <sub>G</sub> /dT = 1A/μS V <sub>GK</sub> = 1V	125	120	A/μS
<b>TRIGGERING PARAMETERS</b>					
I <sub>GT</sub>	Gate trigger current	V <sub>D</sub> = 5V	25	150	mA
V <sub>GT</sub>	Gate trigger voltage		25	2.50	V
I <sub>L</sub>	Latching Current	V <sub>D</sub> = 5V	25	400	mA
I <sub>H</sub>	Holding Current	V <sub>D</sub> = 5V	25	300	mA
P <sub>G-PEAK</sub>	Maximum Peak Gate Power	Pulse width 100μSec		30	W
di/dt	Repetitive rate of rise of current			120	A/μS
V <sub>FGM</sub>	Maximum forward gate voltage			12	V
I <sub>FGM</sub>	Maximum forward gate current			10	A
<b>THERMAL &amp; MECHANICAL PARAMETERS</b>					
R <sub>TH(J-C)</sub>	Thermal impedance, 180 conduction, Sine	Junction to case		0.60	°C/W
R <sub>TH(C-HK)</sub>	Thermal impedance	Case to heatsink		0.20	°C/W
T <sub>J</sub>	Maximum Permissible junction temperature			125	°C
T <sub>STG</sub>	Storage temperature range			-40 - 125	°C
F	Mounting Torque			4	NM
W	Weight			45	gms



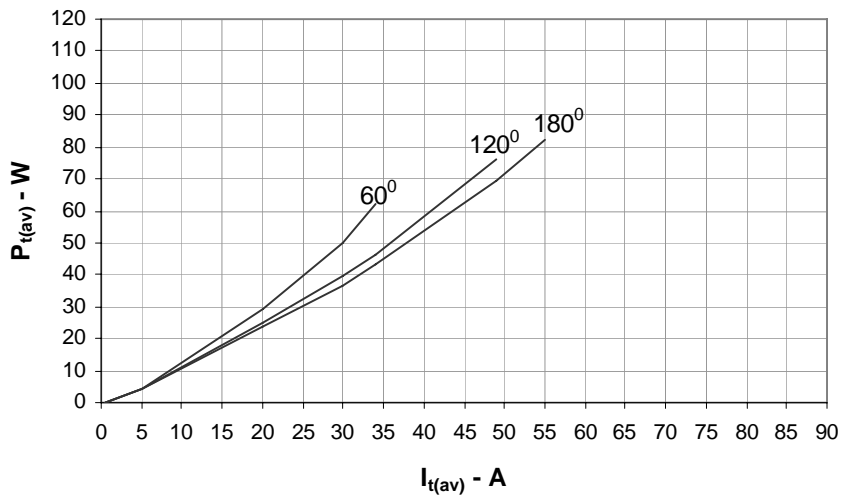
# PHASE CONTROL THYRISTOR H55TBXX



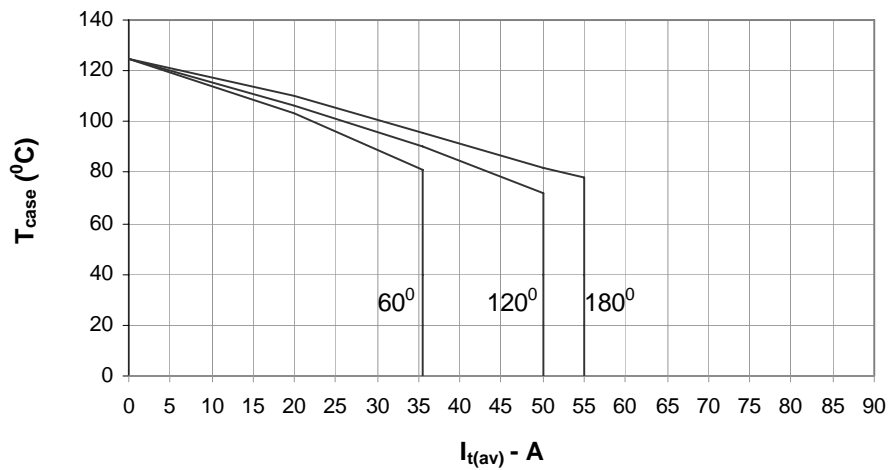
All dimensions in mm

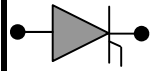


## On State Power Loss

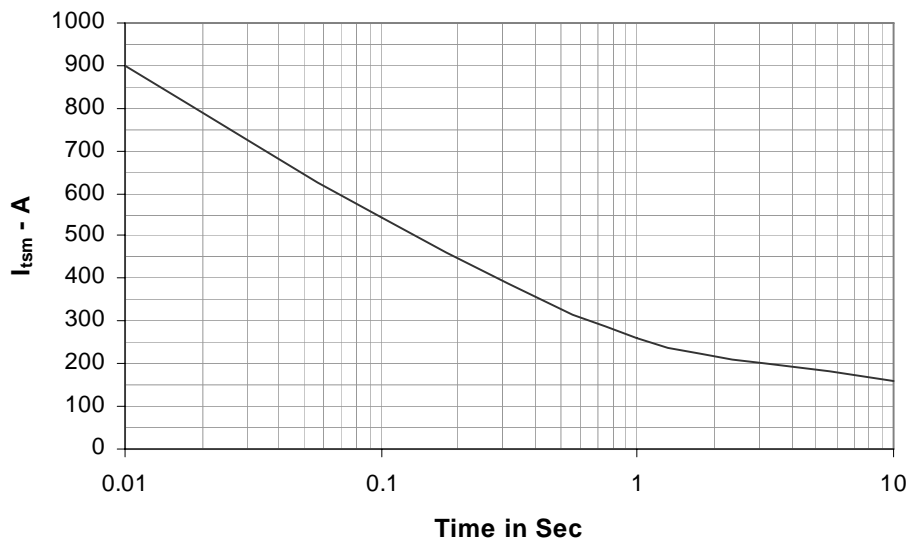


## Maximum Permissible Case Temp

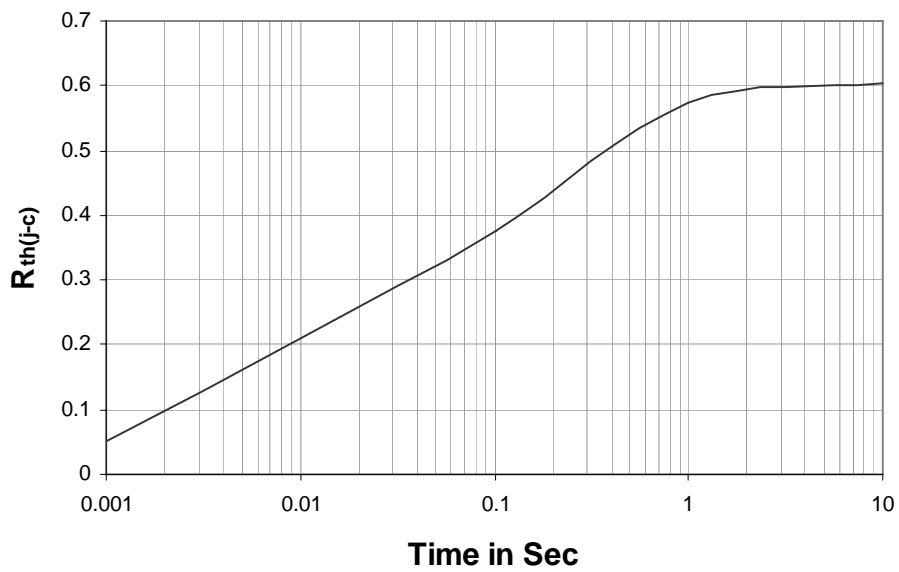


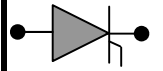


Max non repetitive Surge Current

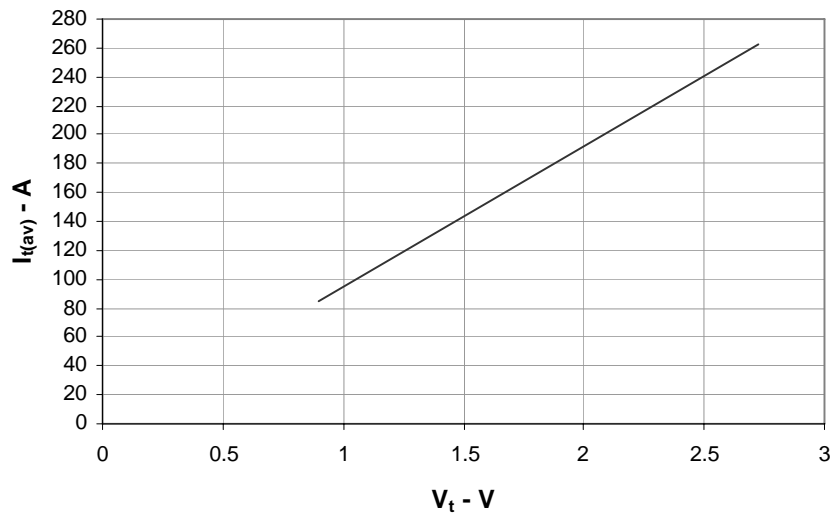


Transient Thermal Impedance Junction to Case

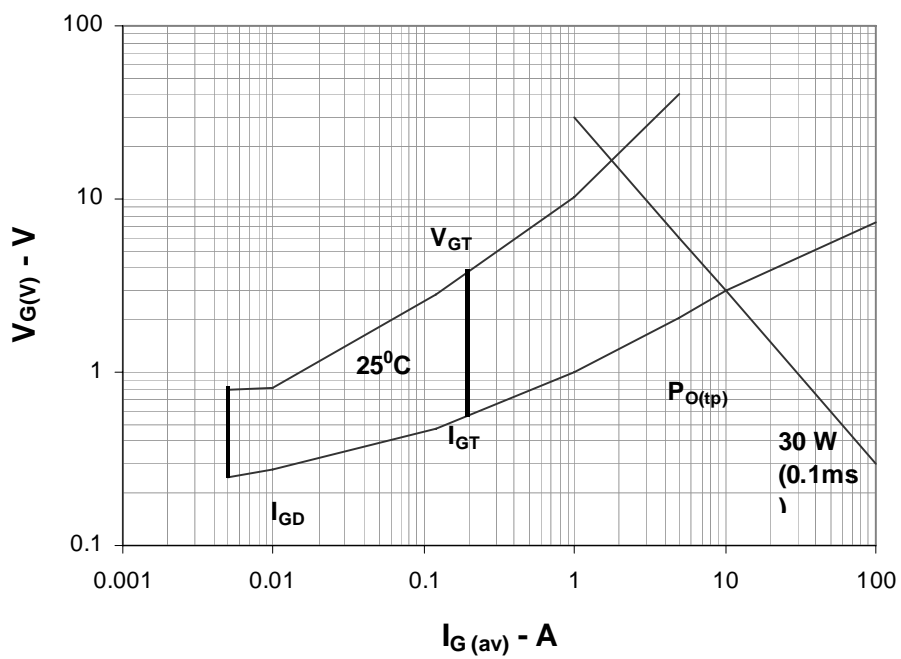




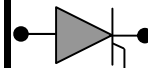
On State Characteristics



Gate Trigger Characteristics



## PHASE CONTROL THYRISTOR H55TBXX



### Ordering Information: -

H	55	TB	XX
Hirect make Thyristor	$I_{F(AV)} = 55A$	TB – with a Pigtail	$V_{RRM} = XX * 100$ e.g.12 * 100 =1200V

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

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6 of 6