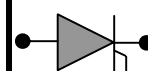


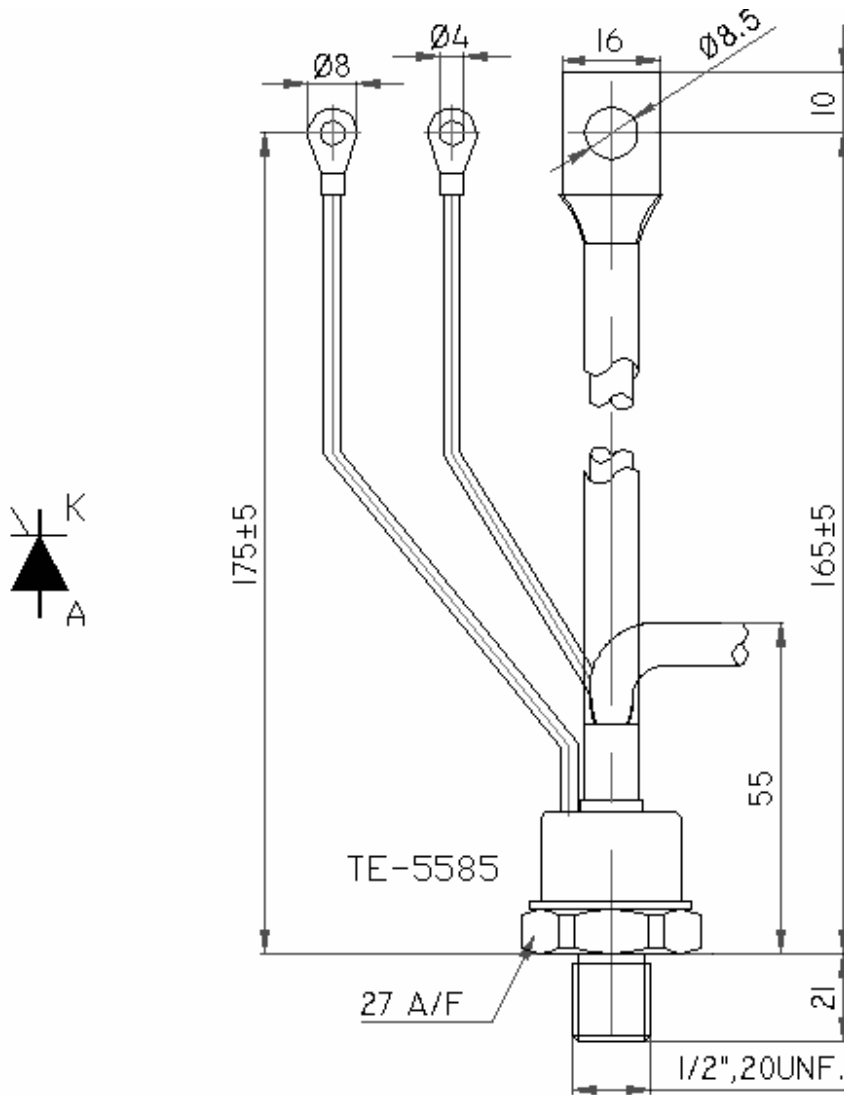
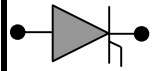
PHASE CONTROL THYRISTOR H85TBXX



Symbol	Characteristics	Conditions	T _J (°C)	Value	Unit
BLOCKING PARAMETERS					
V _{RRM}	Repetitive peak reverse voltage		125	200-1600	V
V _{DRM}	Repetitive peak off-stage voltage		125	200-1600	V
I _{RRM}	Repetitive peak reverse current	V = V _{RRM}	125	30	mA
I _{DRM}	Repetitive peak off-state current	V = V _{RRM}	125	30	mA
CONDUCTING PARAMETERS					
I _{F(AV)}	Average on-state current	180 sine, 50Hz, T _C = 85°C		85	A
I _{RMS}	RMS on-state current			135	A
I _{TSM}	Surge on-state current	Sine wave, 10mS without reverse voltage	125	1650	A
I ² t	I ² t			13.60	kA ² S
V _T	Peak on-state voltage drop	On-state current = 265A	125	1.75	V
V ₀	Threshold voltage		125	1.20	V
R ₀	On-state slope resistance		125	2.60	mΩ
TRIGGERING PARAMETERS					
I _{GT}	Gate trigger current	V _D = 5V	25	150	mA
V _{GT}	Gate trigger voltage		25	2.00	V
I _L	Latching Current	V _D = 5V	25	600	mA
P _{G -PEAK}	Maximum Peak Gate Power	Pulse width 100μSec		100	W
di/dt	Repetitive rate of rise of current			120	A/μSec
V _{FGM}	Maximum forward gate voltage			12	V
I _{FGM}	Maximum forward gate current			20	A
THERMAL & MECHANICAL PARAMETERS					
R _{TH (J-C)}	Thermal impedance, 180 conduction, Sine	Junction to case		0.27	°C/W
R _{TH (C-HK)}	Thermal impedance	Case to heatsink		0.08	°C/W
T _J	Maximum Permissible junction temperature			125	°C
T _{STG}	Storage temperature range			-40 - 125	°C
F	Mounting Torque			14	NM
W	Weight			120	gms



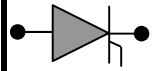
PHASE CONTROL THYRISTOR H85TBXX



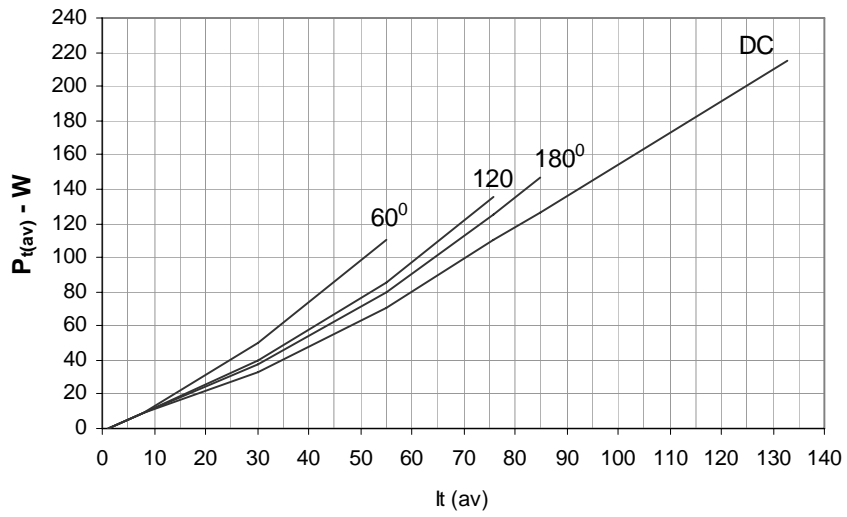
All dimensions in mm



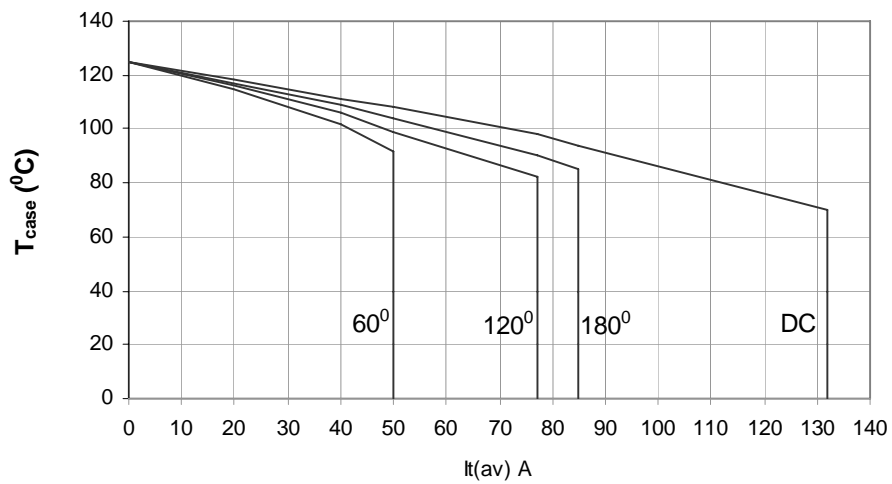
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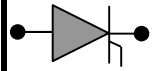


On State Power Loss

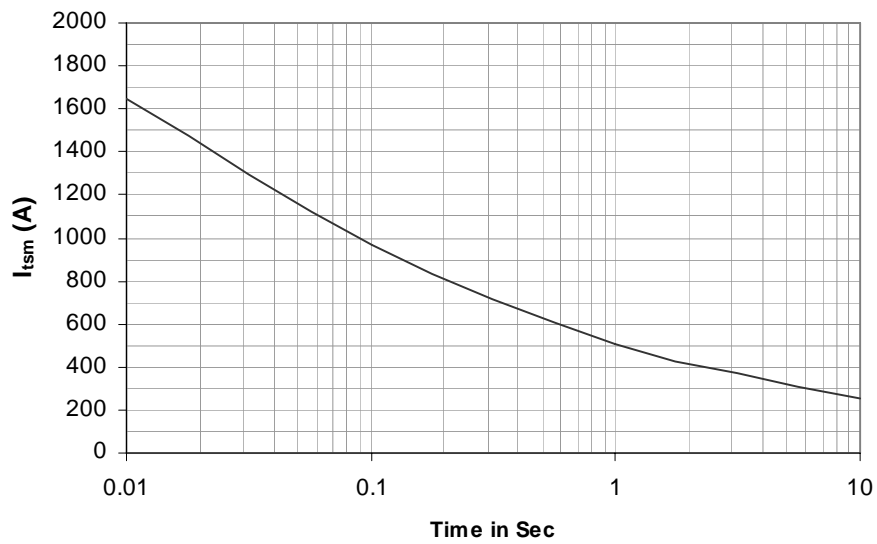


Maximum Permissible Case Temp

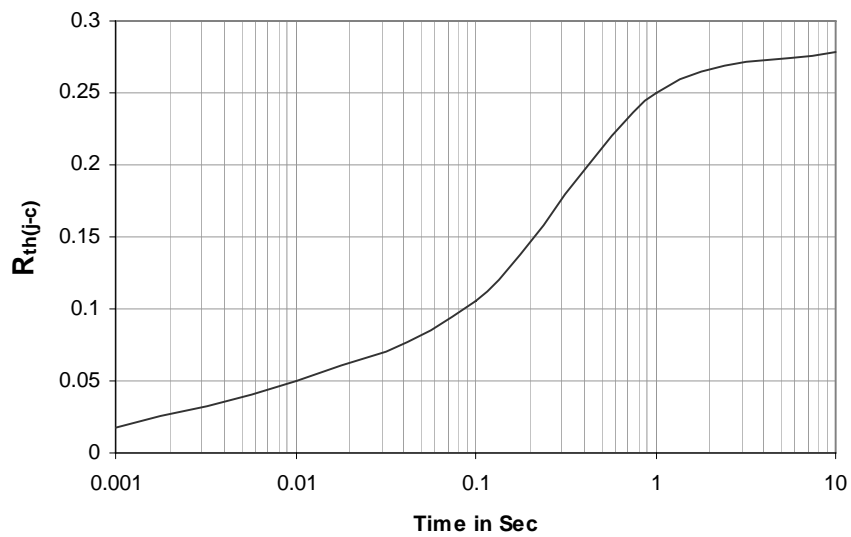


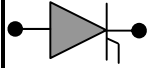


Max non repetitive Surge Current

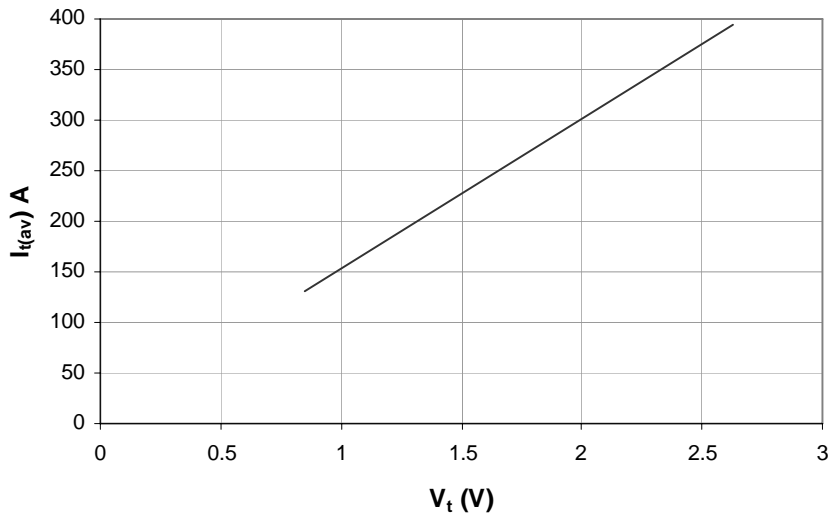


Transient Thermal Impedance Junction to Case

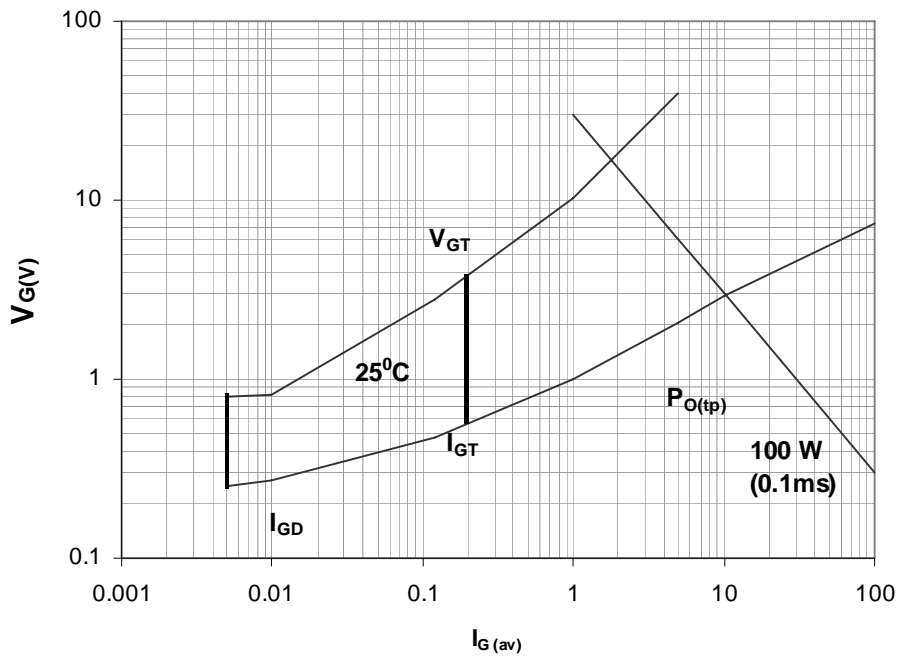




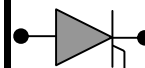
On State Characteristics



Gate Trigger Characteristics



PHASE CONTROL THYRISTOR H85TBXX



Ordering Information: -

H	85	TB	XX
Hirect make Thyristor	$I_{F(AV)} = 85A$	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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