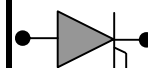


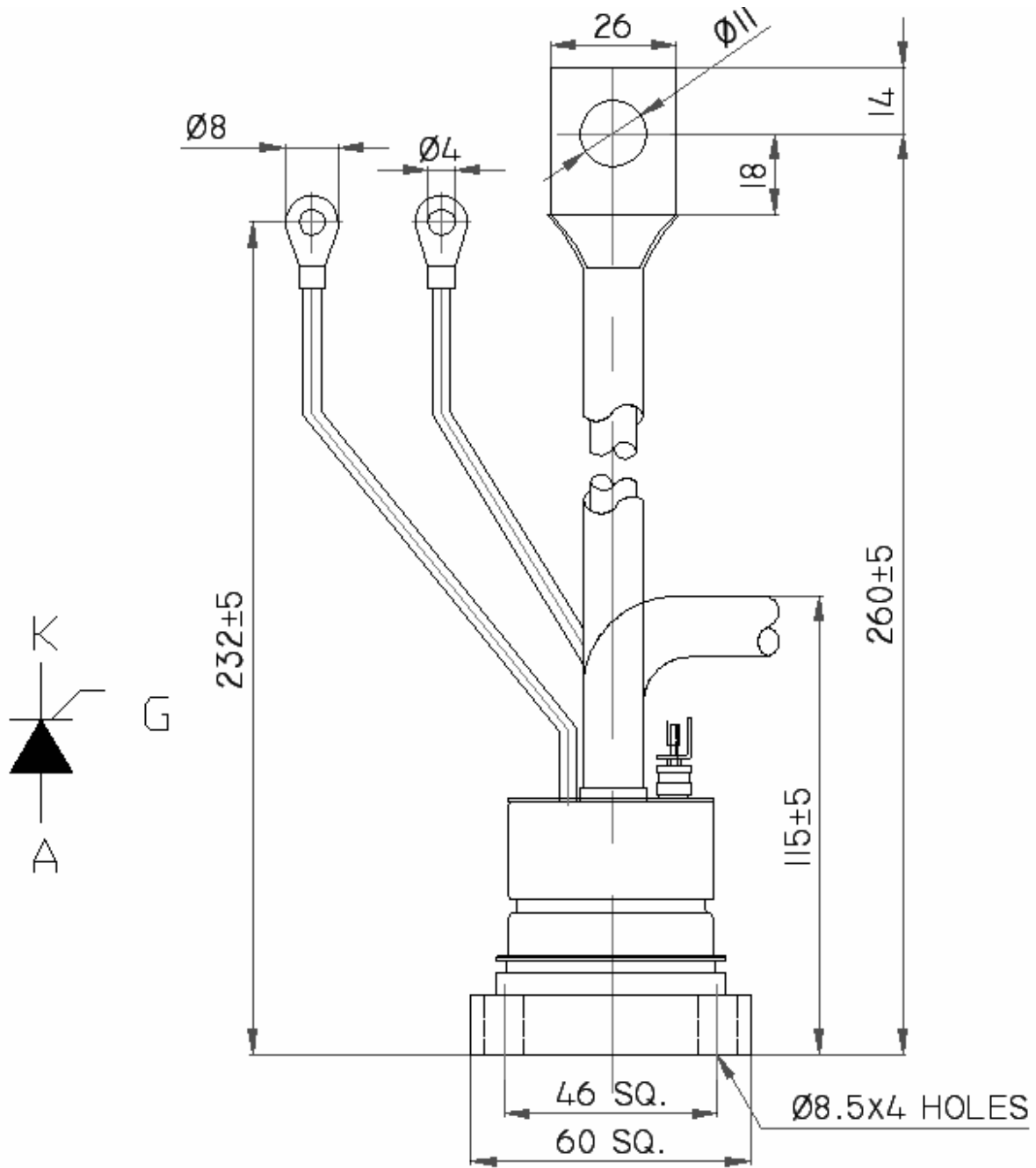
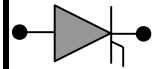
PHASE CONTROL THYRISTOR H400TBXX



Symbol	Characteristics	Conditions	T_J ($^{\circ}\text{C}$)	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	80	mA
I_{DRM}	Repetitive peak off-state current	$V = V_{RRM}$	125	80	mA
CONDUCTING PARAMETERS					
$I_{F(AV)}$	Average on-state current	180 sine, 50Hz, $T_C = 85^{\circ}\text{C}$		400	A
I_{RMS}	RMS on-state current			628	A
I_{TSM}	Surge on-state current	Sine wave, 10mS without reverse voltage	125	10	kA
I^2t	I^2t			500	kA^2S
V_T	Peak on-state voltage drop	On-state current = 1.26kA	125	1.45	V
V_0	Threshold voltage		125	0.90	V
R_0	On-state slope resistance		125	0.40	$\text{m}\Omega$
TRIGGERING PARAMETERS					
I_{GT}	Gate trigger current	$V_D = 5\text{V}$	25	250	mA
V_{GT}	Gate trigger voltage		25	2.00	V
I_L	Latching Current	$V_D = 5\text{V}$	25	1000	mA
P_{G-PEAK}	Maximum Peak Gate Power	Pulse width 100 μSec		150	W
di/dt	Repetitive rate of rise of current			120	$\text{A}/\mu\text{Sec}$
V_{FGM}	Maximum forward gate voltage			12	V
I_{FGM}	Maximum forward gate current			40	A
THERMAL & MECHANICAL PARAMETERS					
$R_{TH(J-C)}$	Thermal impedance, 180 conduction, Sine	Junction to case		0.076	$^{\circ}\text{C}/\text{W}$
$R_{TH(C-HK)}$	Thermal impedance	Case to heatsink		0.015	$^{\circ}\text{C}/\text{W}$
T_J	Maximum Permissible junction temperature			125	$^{\circ}\text{C}$
T_{STG}	Storage temperature range			-40 - 125	$^{\circ}\text{C}$
F	Mounting Torque			18	NM
W	Weight			875	gms



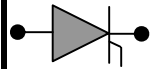
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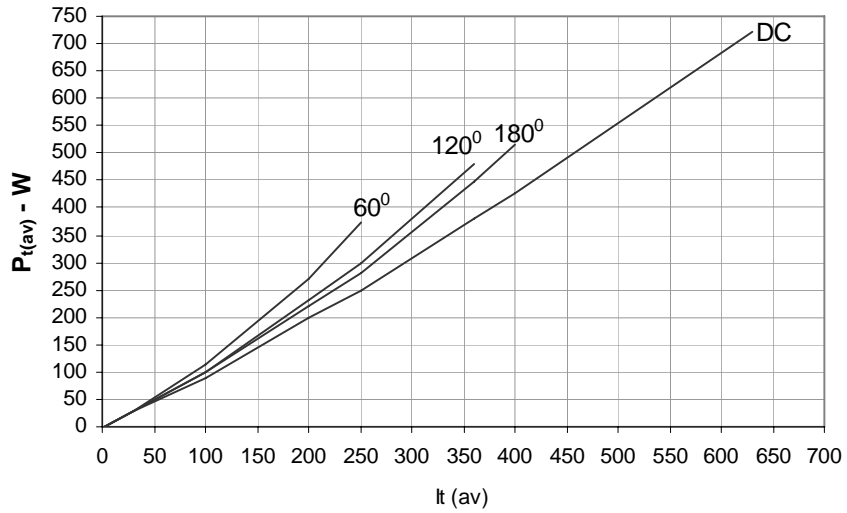
All dimensions in mm



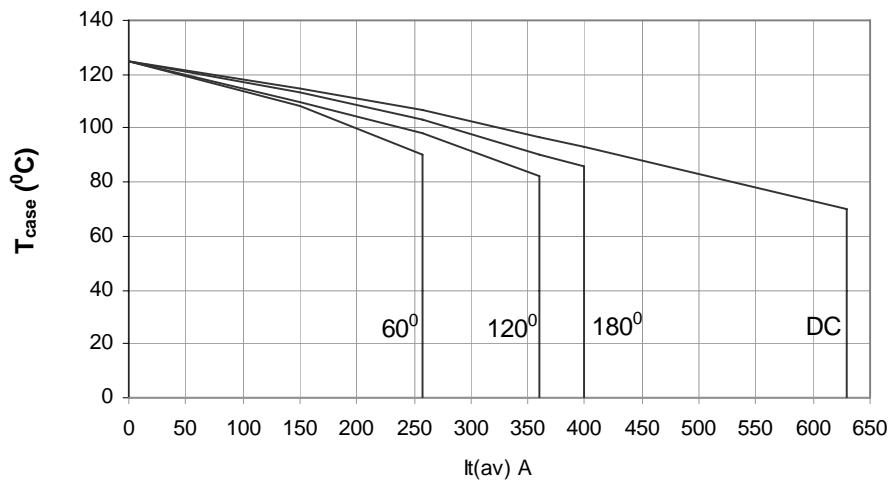
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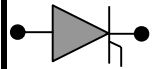


On State Power Loss

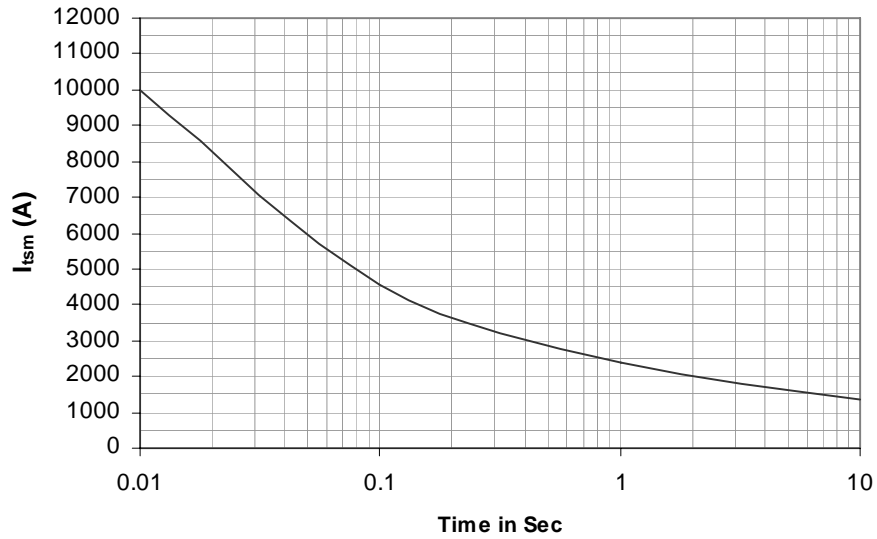


Maximum Permissible Case Temp

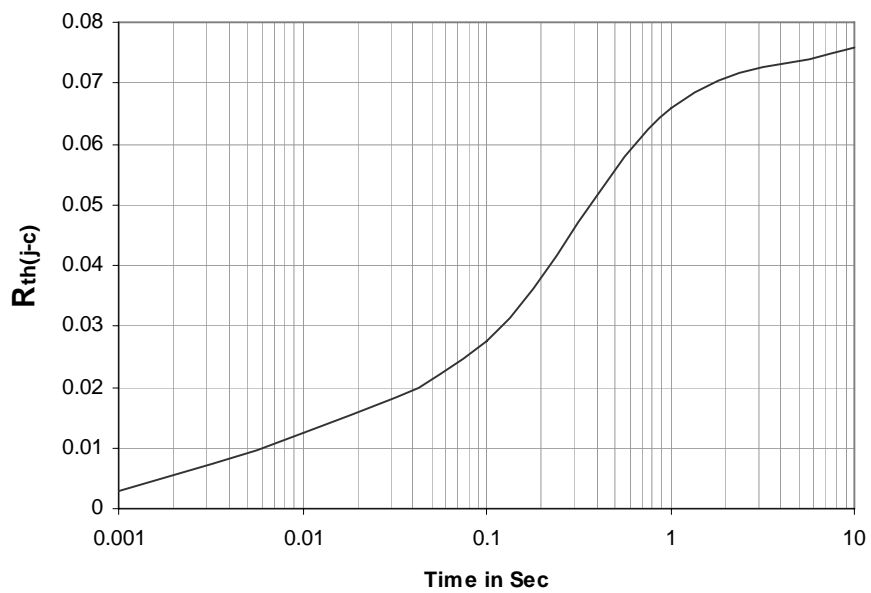


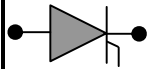


Max non repetitive Surge Current

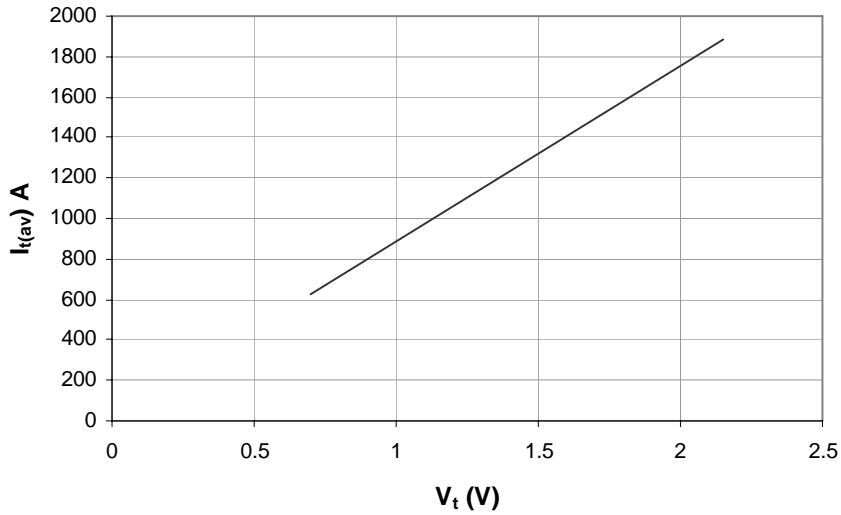


Transient Thermal Impedance Junction to Case

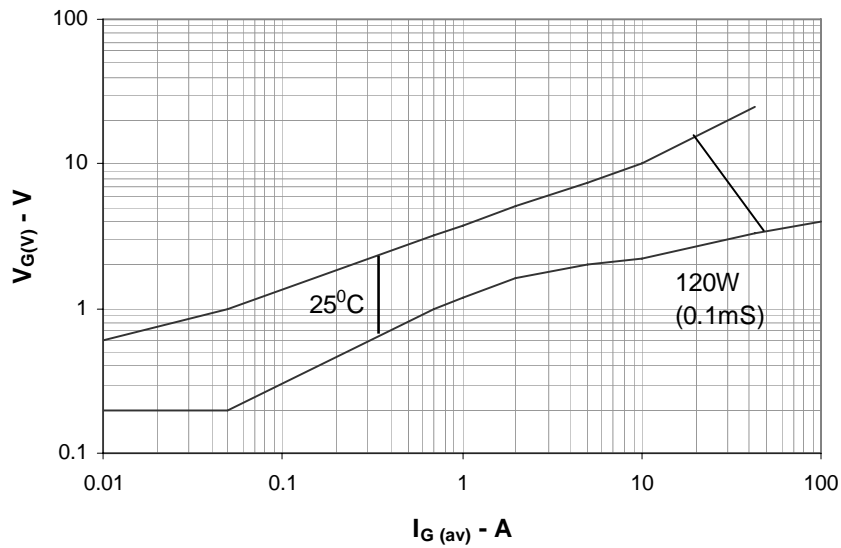




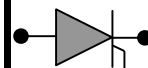
On State Characteristics



Gate Trigger Characteristics



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Ordering Information: -

H	400	TB	XX
Hirect make Thyristor	$I_{F(AV)} = 400A$	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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