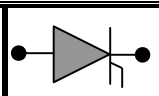
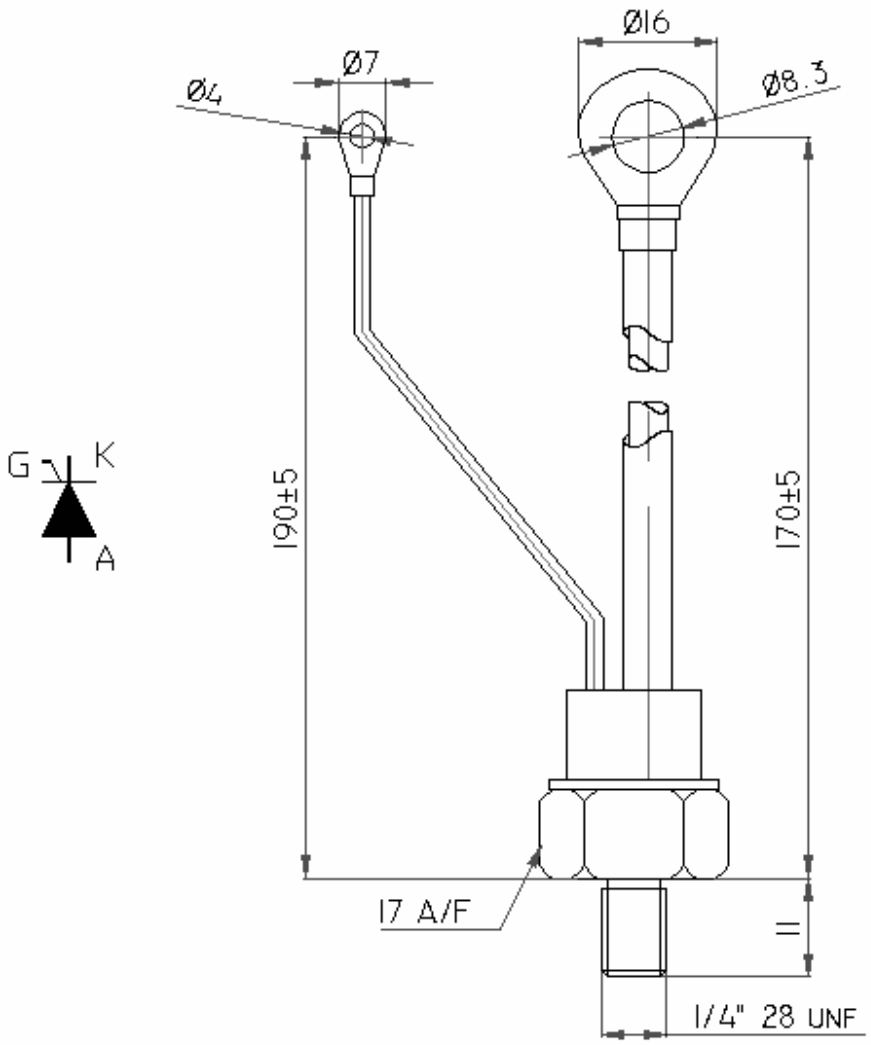
PHASE CONTROL THYRISTOR H45TBXX



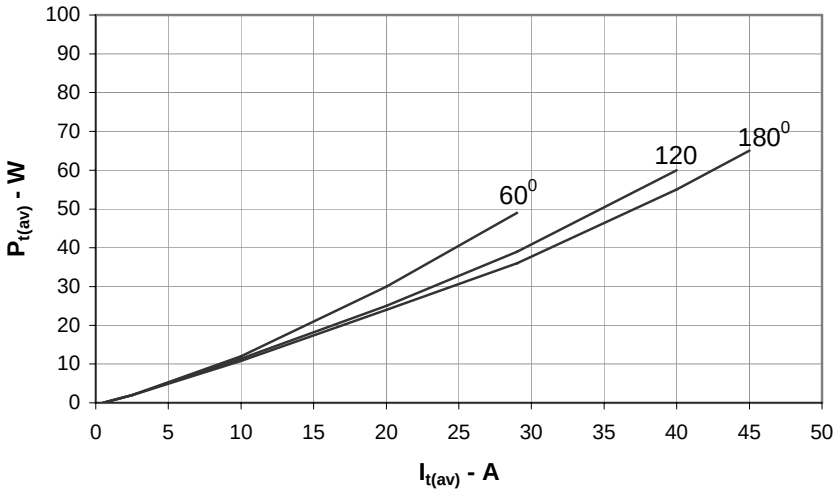
Symbol	Characteristics	Conditions	T_J (^{0}C)	Value	Unit
BLOCKING PARAMETERS					
V_{RRM}	Repetitive peak reverse voltage		125	200-1600	V
V_{DRM}	Repetitive peak off-stage voltage		125	200-1600	V
I_{RRM}	Repetitive peak reverse current	V = V_{RRM}	125	10	mA
I_{DRM}	Repetitive peak off-state current	V = V_{RRM}	125	10	mA
d_V/d_T	Rep. rate of change of voltage	@ 67%V_{DRM}	125	600	V/µS
CONDUCTING PARAMETERS					
$I_{F(AV)}$	Average on-state current	180 sine, 50H_Z, T_C = 85^{0}C		45	A
I_{RMS}	RMS on-state current			70	A
I_{TSM}	Surge on-state current	Sine wave, 10mS without reverse voltage	125	800	A
I^2t	I^2t			3200	A^2S
V_T	Peak on-state voltage drop	On-state current = 150A	125	1.72	V
V_0	Threshold voltage		125	0.95	V
R_0	On-state slope resistance		125	4.50	mΩ
di/dt	Repetitive rate of rise of current	d_{IG}/d_T = 1A/µS V_{GK} = 1V	125	120	A/µS
TRIGGERING PARAMETERS					
I_{GT}	Gate trigger current	V_D = 5V	25	150	mA
V_{GT}	Gate trigger voltage		25	2.50	V
I_L	Latching Current	V_D = 5V	25	400	mA
I_H	Holding Current	V_D = 5V	25	300	mA
$P_{G\ -PEAK}$	Maximum Peak Gate Power	Pulse width 100µSec		30	W
di/dt	Repetitive rate of rise of current			120	A/µS
V_{FGM}	Maximum forward gate voltage			12	V
I_{FGM}	Maximum forward gate current			10	A
THERMAL & MECHANICAL PARAMETERS					
$R_{TH\ (J-C)}$	Thermal impedance, 180 conduction, Sine	Junction to case		0.60	^{0}C/W
$R_{TH\ (C-HK)}$	Thermal impedance	Case to heatsink		0.20	^{0}C/W
T_J	Maximum Permissible junction temperature			125	^{0}C
T_{STG}	Storage temperature range			-40 - 125	^{0}C
F	Mounting Torque			4	NM
W	Weight			45	gms

PHASE CONTROL THYRISTOR H45TBXX

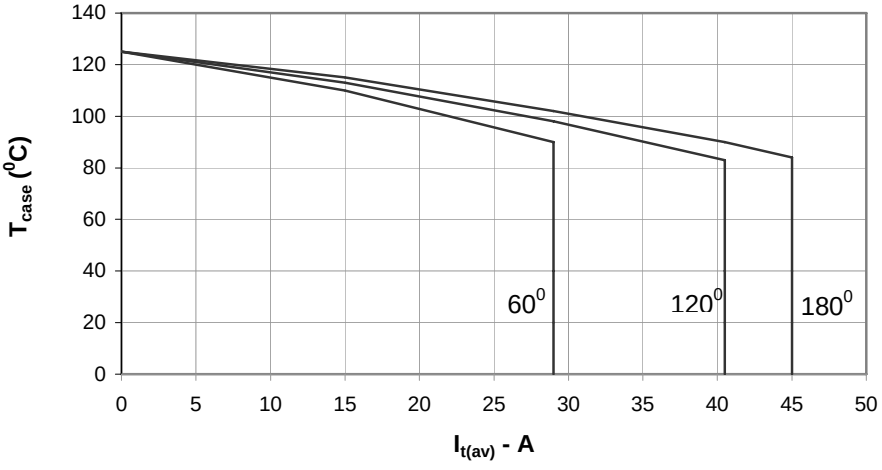


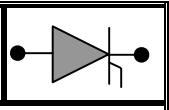
All dimensions in mm

On State Power Loss

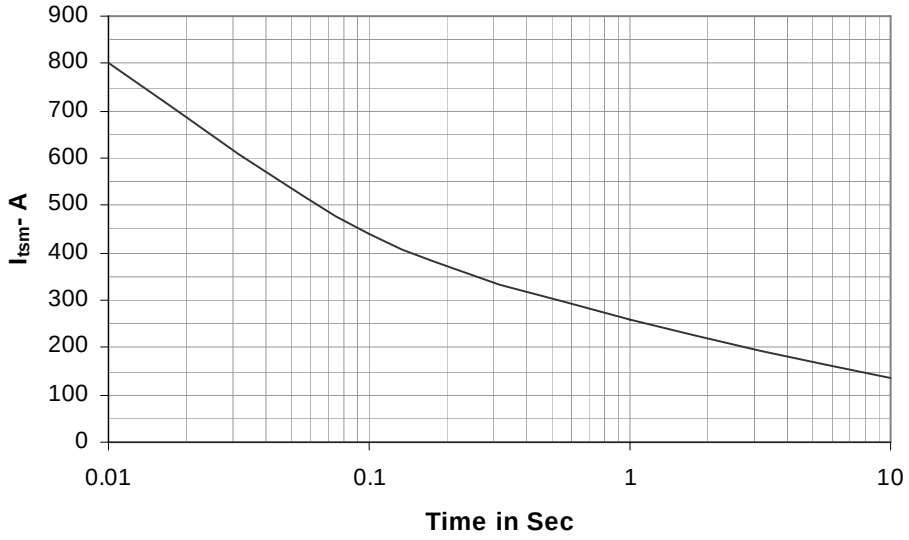


Maximum Permissible Case Temp

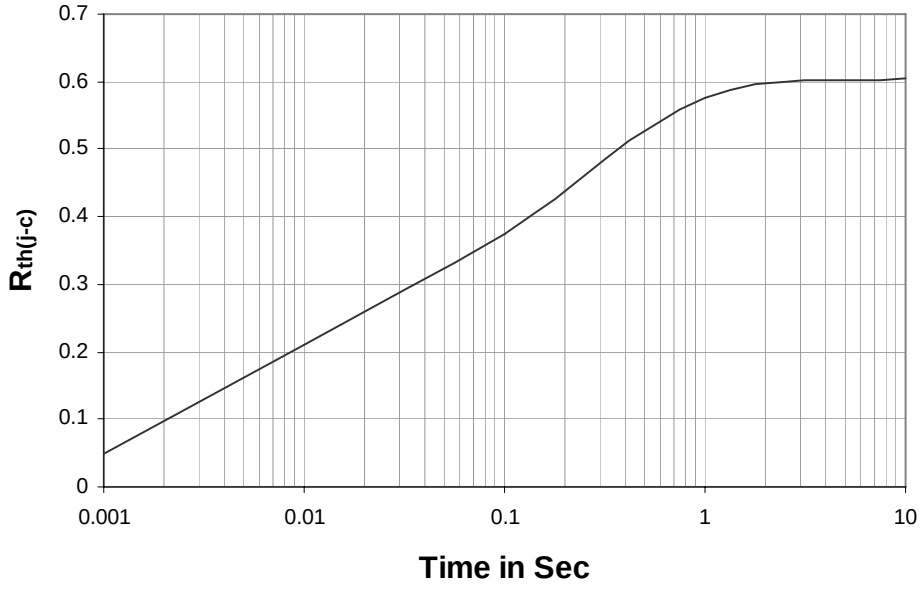




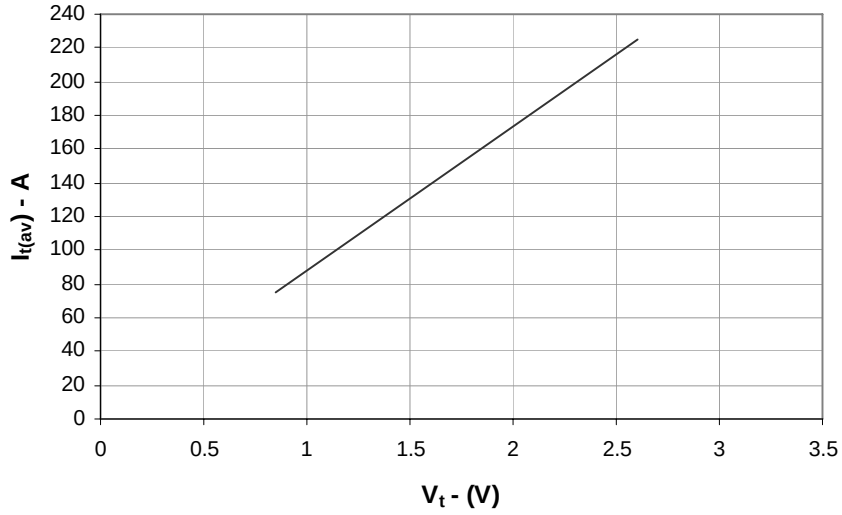
Max non repetitive Surge Current



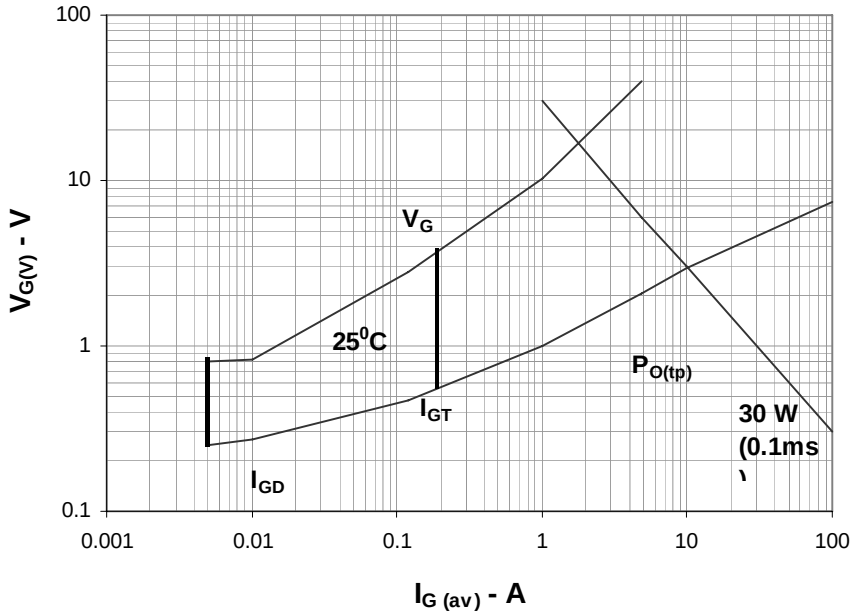
Transient Thermal Impedance Junction to Case

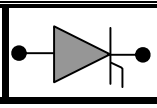


On State Characteristics



Gate Trigger Characteristics





Ordering Information: -

H	45	TB	XX
Hirect make Thyristor	$I_{F(AV)}$ = 45A	TB – with a Pigtail	V_{RRM} = XX x 100 e.g.12 * 100 =1200V

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