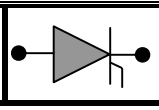
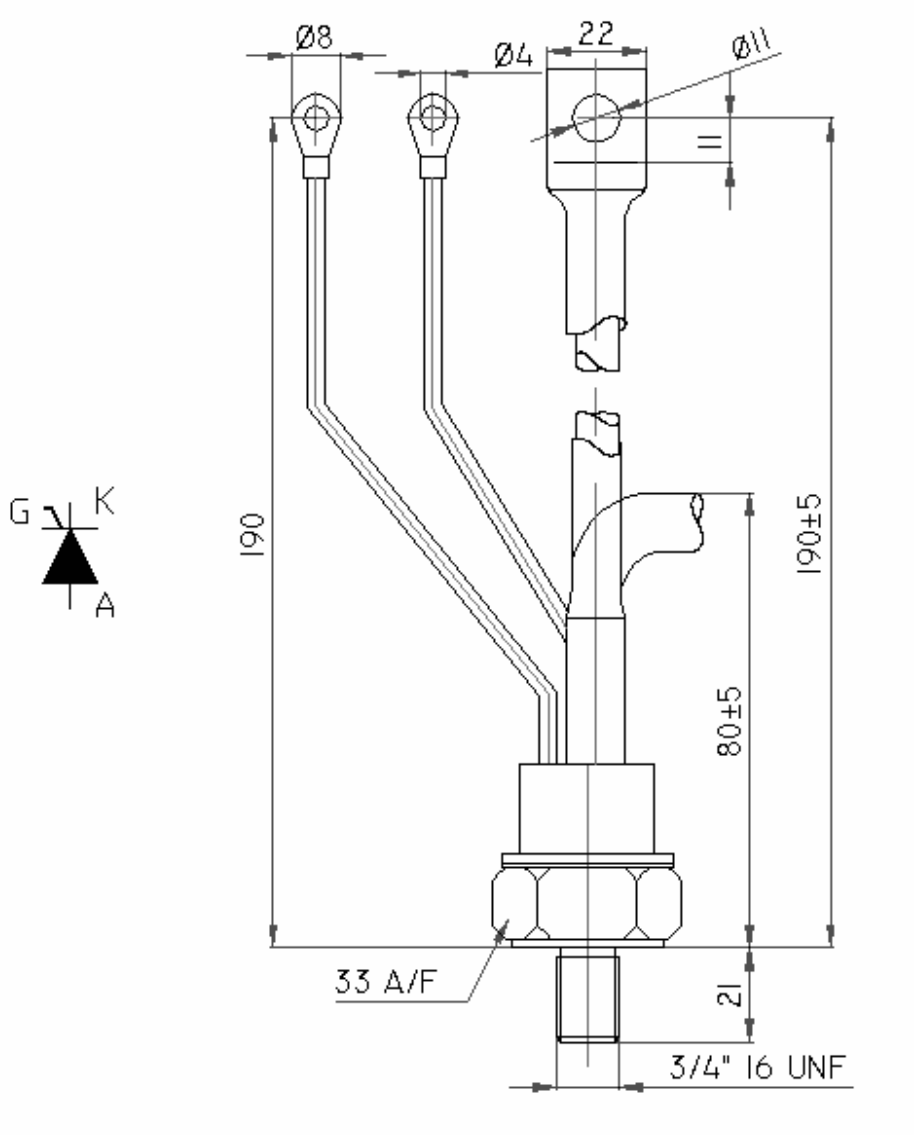
PHASE CONTROL THYRISTOR H175TBXX

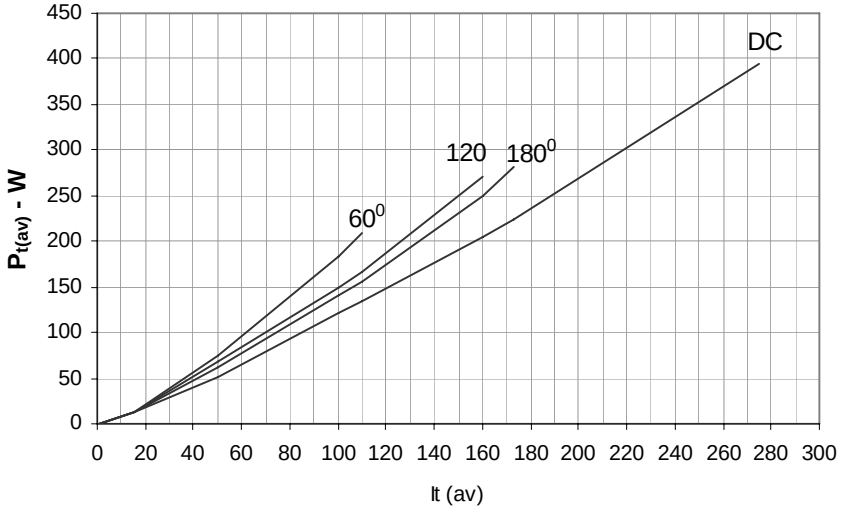


Symbol	Characteristics	Conditions	T_J (^{0}C)	Value	Unit
BLOCKING PARAMETERS					
V_{RRM}	Repetitive peak reverse voltage		125	200-1800	V
V_{DRM}	Repetitive peak off-stage voltage		125	200-1800	V
I_{RRM}	Repetitive peak reverse current	$V = V_{RRM}$	125	50	mA
I_{DRM}	Repetitive peak off-state current	$V = V_{RRM}$	125	50	mA
CONDUCTING PARAMETERS					
$I_{F(AV)}$	Average on-state current	180 sine, 50H$_Z$, $T_C = 85^0$C		175	A
I_{RMS}	RMS on-state current			275	A
I_{TSM}	Surge on-state current	Sine wave, 10mS without reverse voltage	125	4.60	kA
I^2t	I^2t			106	kA^2S
V_T	Peak on-state voltage drop	On-state current = 550A	125	1.76	V
V_0	Threshold voltage		125	1.08	V
R_0	On-state slope resistance		125	1.30	mΩ
TRIGGERING PARAMETERS					
I_{GT}	Gate trigger current	V_D = 5V	25	200	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		120	W
di/dt	Repetitive rate of rise of current			150	A/μSec
V_{FGM}	Maximum forward gate voltage			12	V
I_{FGM}	Maximum forward gate current			25	A
THERMAL & MECHANICAL PARAMETERS					
$R_{TH\ (J-C)}$	Thermal impedance, 180 conduction, Sine	Junction to case		0.135	^{0}C/W
$R_{TH\ (C-HK)}$	Thermal impedance	Case to heatsink		0.04	^{0}C/W
T_J	Maximum Permissible junction temperature			125	^{0}C
T_{STG}	Storage temperature range			-40 - 125	^{0}C
F	Mounting Torque			26	NM
W	Weight			320	gms

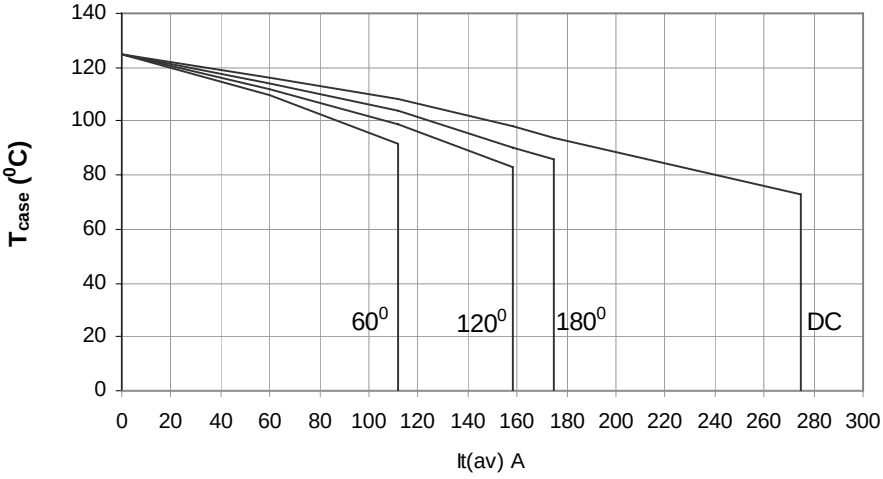


All dimensions in mm

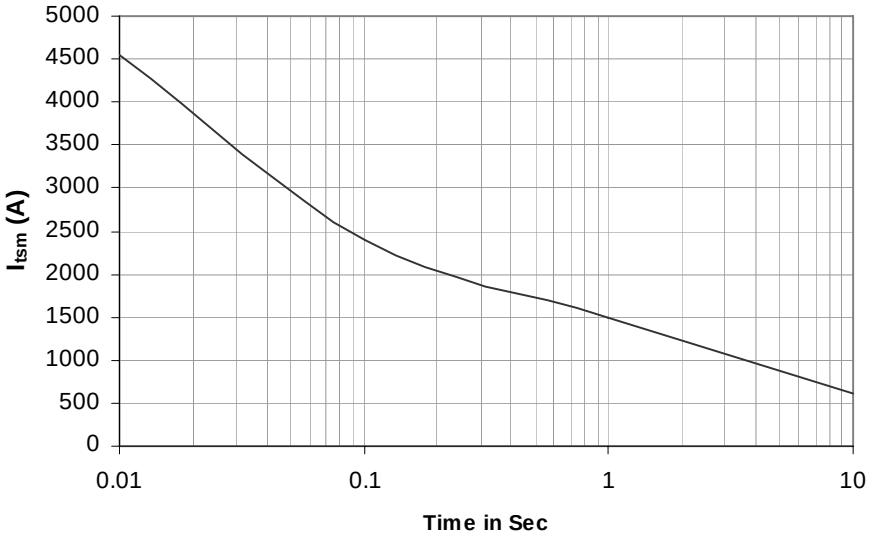
On State Power Loss



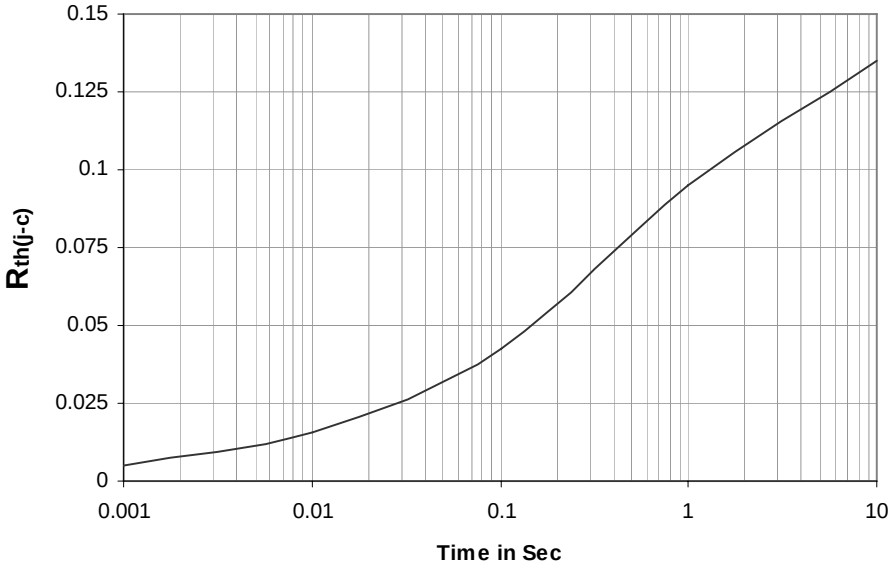
Maximum Permissible Case Temp



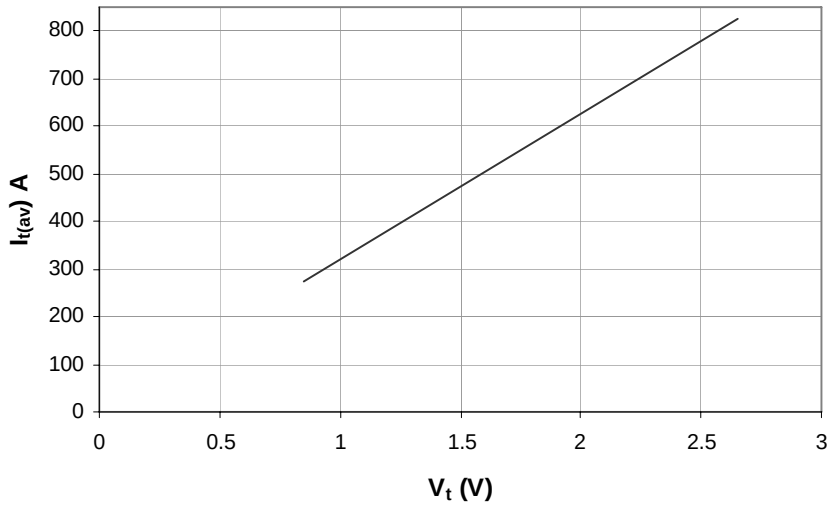
Max non repetitive Surge Current



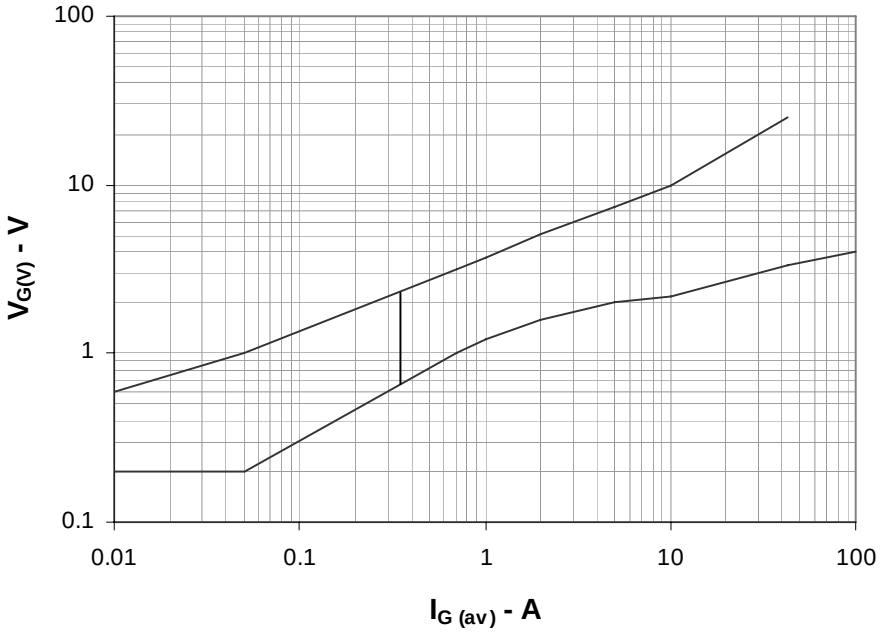
Transient Thermal Impedance Junction to Case

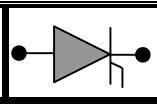


On State Characteristics



Gate Trigger Characteristics





Ordering Information: -

H	175	TB	XX
Hirect make Thyristor	$I_{F(AV)}$ = 175A	TB – with a Pigtail	V_{RRM} = XX * 100 e.g.12 * 100 =1200V

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