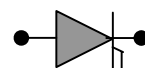


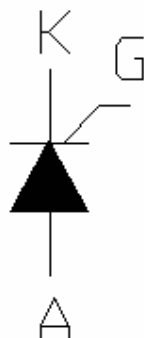
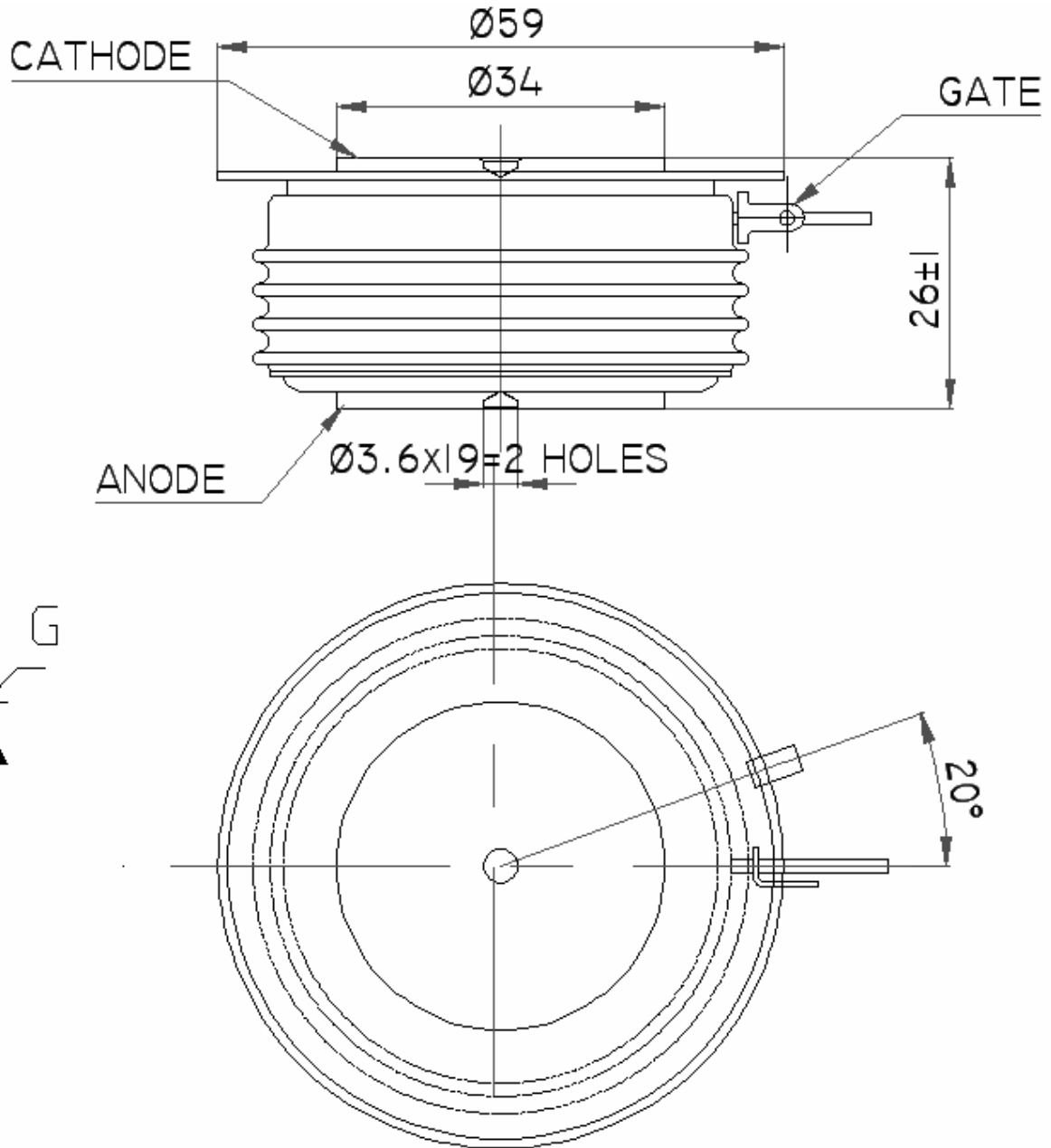
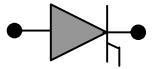
PHASE CONTROL THYRISTOR H1590CHXX



Symbol	Characteristics	Conditions	T _J (°C)	Value	Unit
BLOCKING PARAMETERS					
V _{RRM}	Repetitive peak reverse voltage		125	200-600	V
V _{DRM}	Repetitive peak off-stage voltage		125	200-600	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 = 65°C		1590	A
I _{RMS}	RMS on-state current			2500	A
I _{TSM}	Surge on-state current	Sine wave, 10mS without reverse voltage	125	20	kA
I ² t	I ² t			2000	kA ² S
V _T	Peak on-state voltage drop	On-state current = 3kA	125	1.37	V
V ₀	Threshold voltage		125	1.00	V
R ₀	On-state slope resistance		125	0.10	mΩ
TRIGGERING PARAMETERS					
I _{GT}	Gate trigger current	V _D = 5V	25	250	mA
V _{GT}	Gate trigger voltage		25	2.00	V
I _L	Latching Current	V _D = 5V	25	1000	mA
P _{G-PEAK}	Maximum Peak Gate Power	Pulse width 100μSec		150	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			50	A
THERMAL & MECHANICAL PARAMETERS					
R _{TH(J-C)}	Thermal impedance, 180 conduction, Sine	Junction to case		0.033	°C/W
R _{TH(C-HK)}	Thermal impedance	Case to heatsink		0.005	°C/W
T _J	Maximum Permissible junction temperature			125	°C
T _{STG}	Storage temperature range			-40 - 125	°C
F	Mounting Torque			15	KN
W	Weight			280	gms

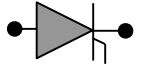


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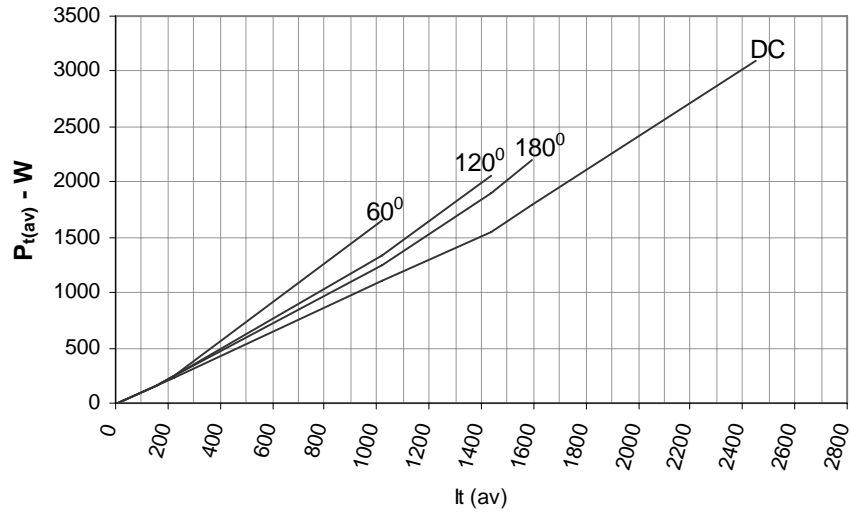


All dimensions in mm

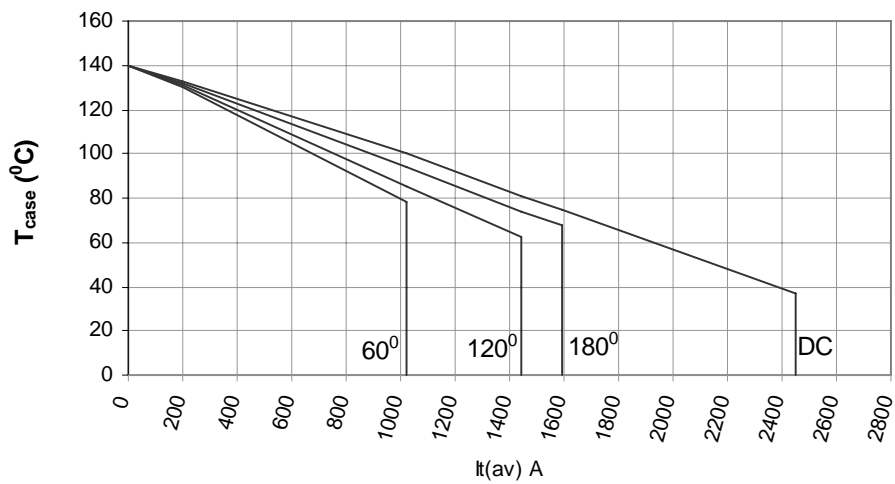


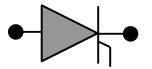


On State Power Loss

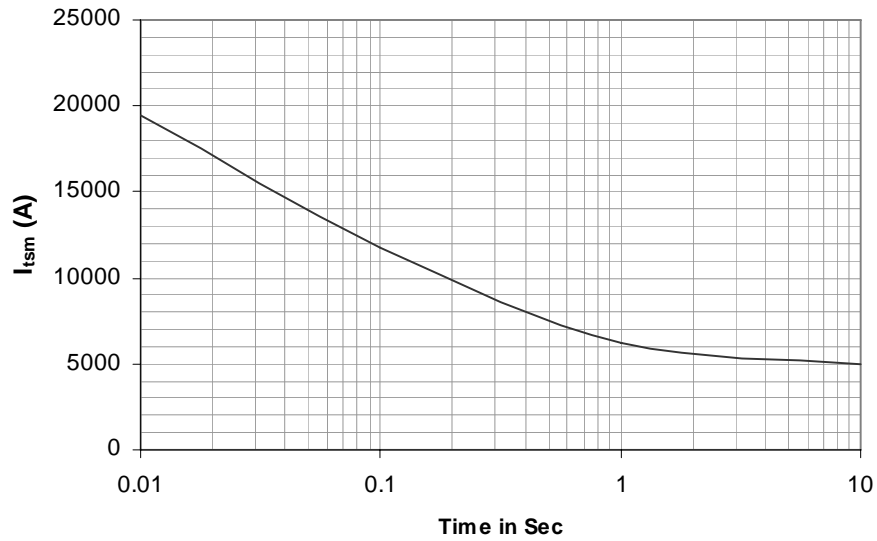


Maximum Permissible Case Temp

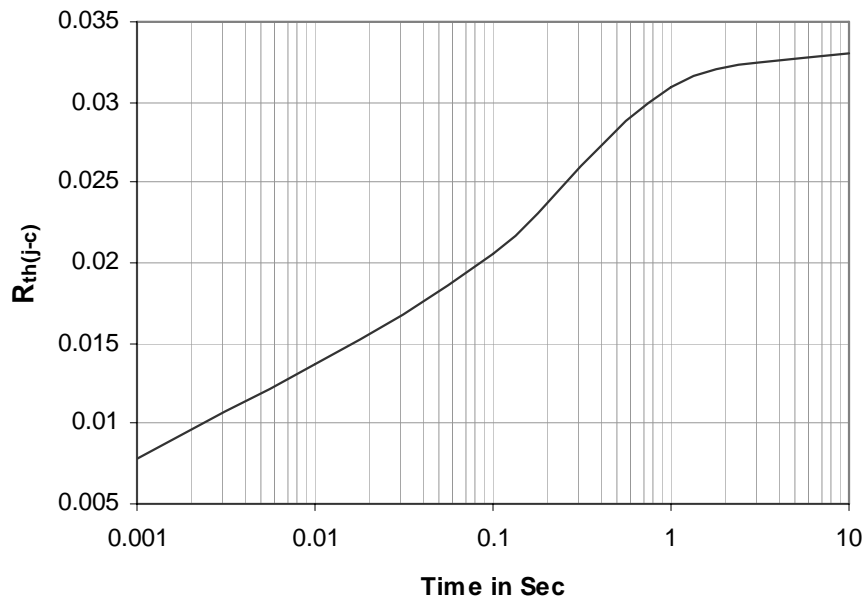


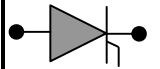


Max non repetitive Surge Current

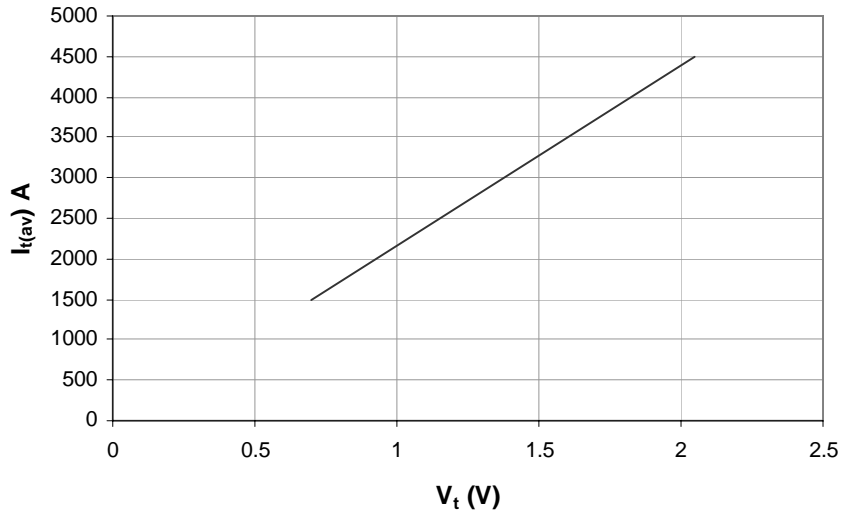


Transient Thermal Impedance Junction to Case

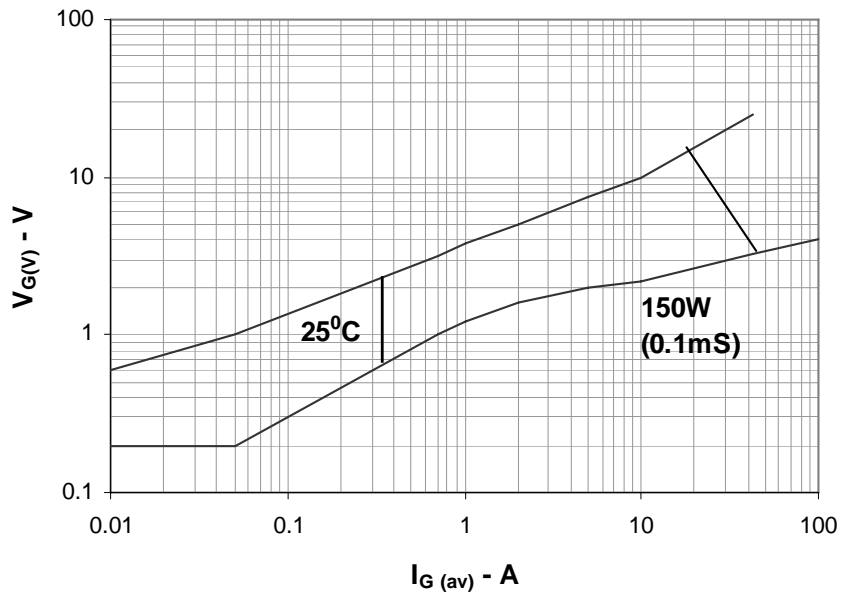




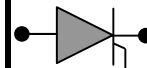
On State Characteristics



Gate Trigger Characteristics



PHASE CONTROL THYRISTOR H1590CHXX



Ordering Information: -

H	1590	CH	XX
Hirect make Thyristor	$I_{F(AV)} = 1590A$	Capsule Thyristor	$V_{RRM} = XX * 100$ e.g. $6 * 100 = 600V$

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