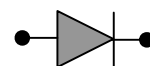


Capsule Type Rectifier Diode SHXXC1850

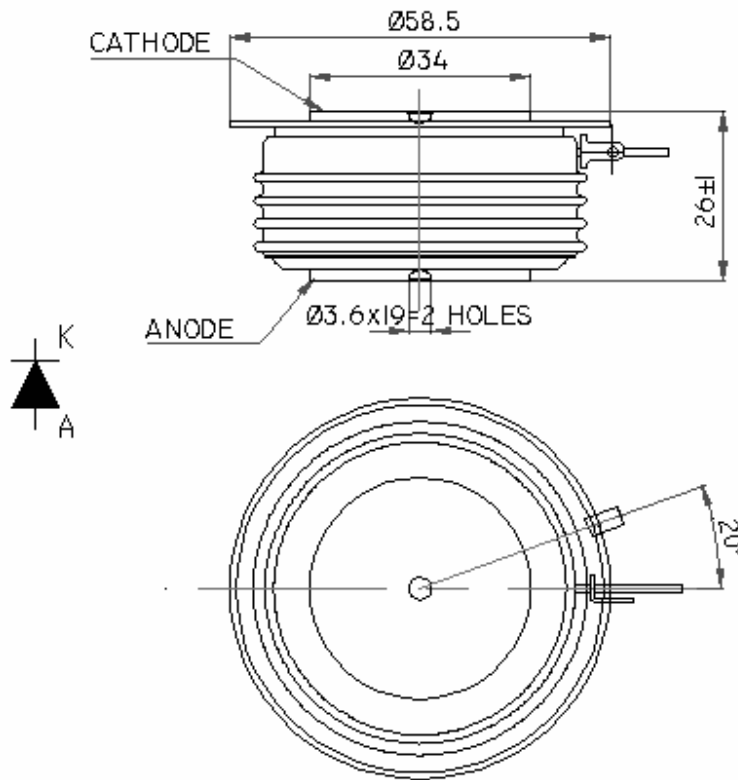
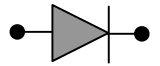


Symbol	Characteristics	Conditions	$T_J(^{\circ}\text{C})$	Value	Unit
BLOCKING PARAMETERS					
V_{RRM}	Repetitive peak reverse voltage		180	200-1800	V
I_{RRM}	Repetitive peak reverse current	$V = V_{RRM}$	180	40	mA
CONDUCTING PARAMETERS					
$I_{F(AV)}$	Average on-state current	180 sine, 50Hz, $T_C = 63^{\circ}\text{C}$		1850	A
I_{RMS}	RMS on-state current			2900	A
I_{FSM}	Non repetitive peak surge on-state current	Sine wave, 10mS without reverse voltage	180	20500	A
I^2t	Permissible surge energy			2100	kA ² S
V_{FM}	Peak on-state voltage drop	On-state current = 3000A	180	1.44	V
V_0	Typical forward conduction Threshold voltage		180	0.74	V
r_0	Typical forward slope resistance		180	0.20	m Ω
THERMAL & MECHANICAL PARAMETERS					
$R_{TH(J-C)}$	Thermal impedance, 180 ^o conduction, Sine	Junction to case		0.038	^o C/W
$R_{TH(C-HK)}$	Thermal impedance	Case to heatsink		0.005	^o C/W
T_J	Maximum Permissible junction temperature			180	^o C
T_{STG}	Storage temperature range			-40 – 180	^o C
F	Mounting Torque			15	KN
W	Weight			340	gms



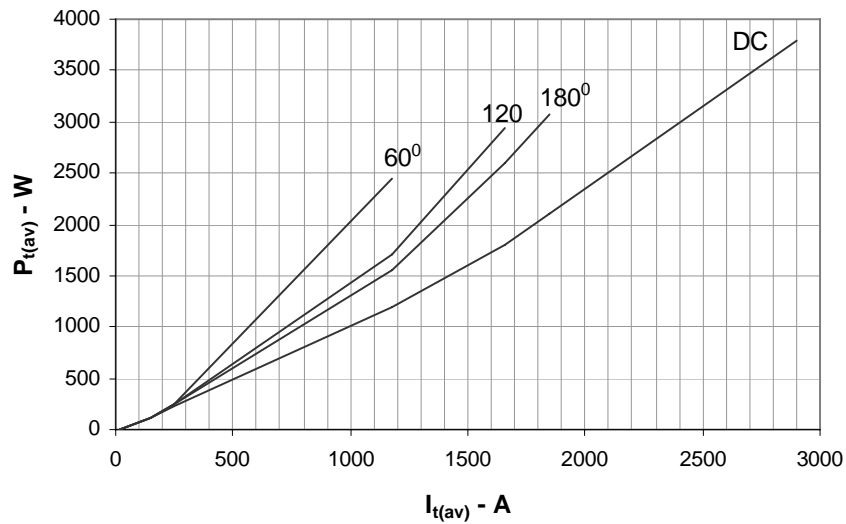
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Capsule Type Rectifier Diode SHXXC1850



All dimensions in mm

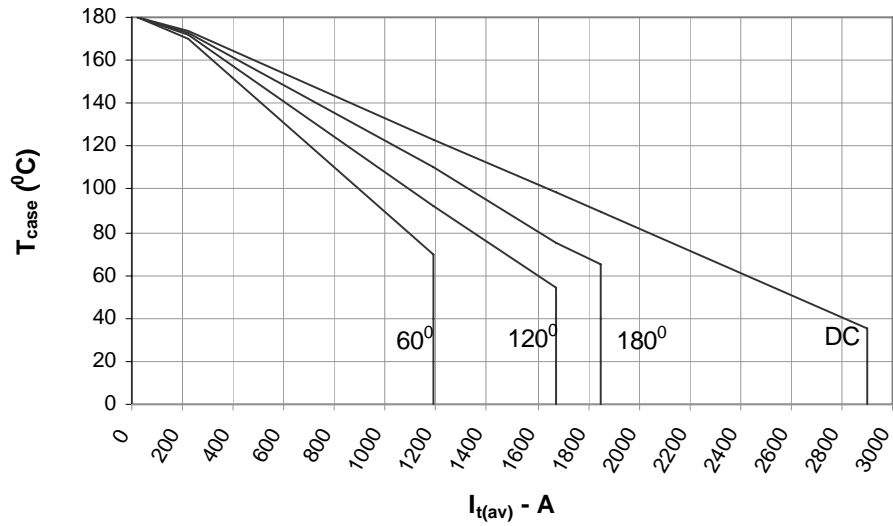
On State Power Loss



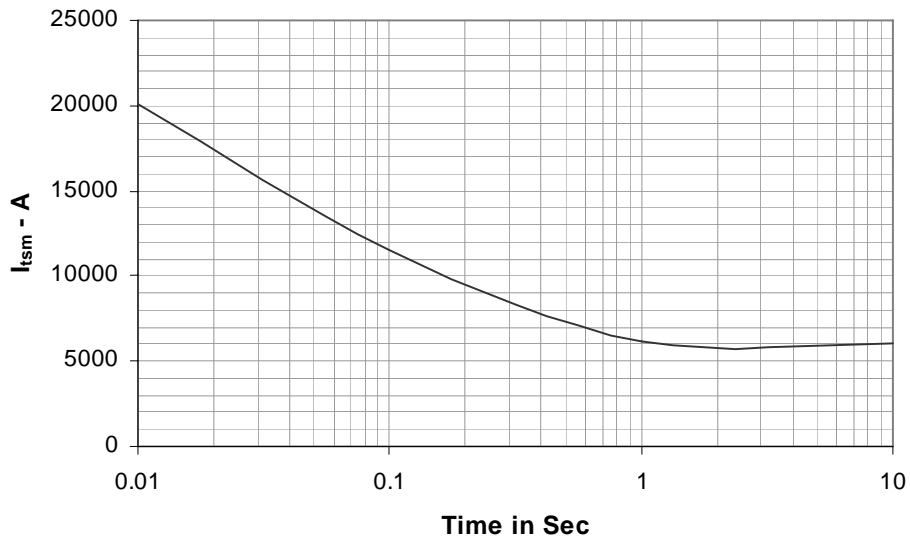
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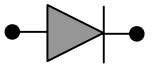


Maximum Permissible Case Temp

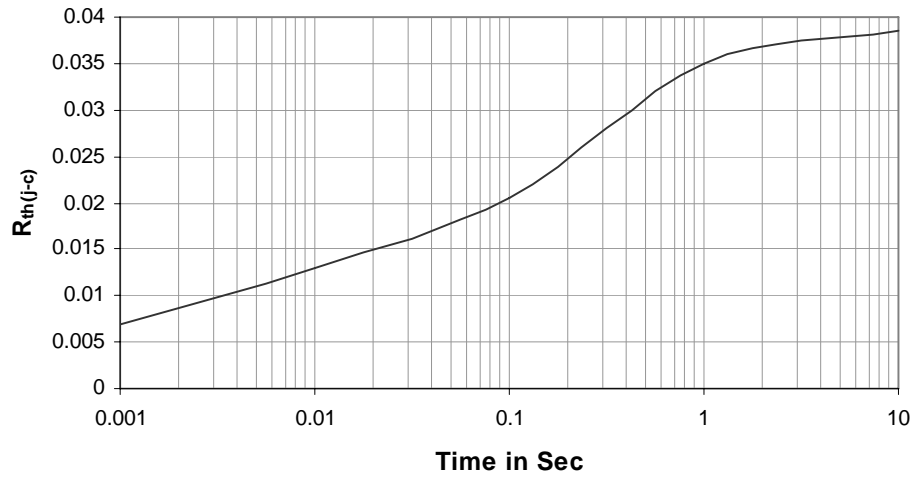


Max non repetitive Surge Current

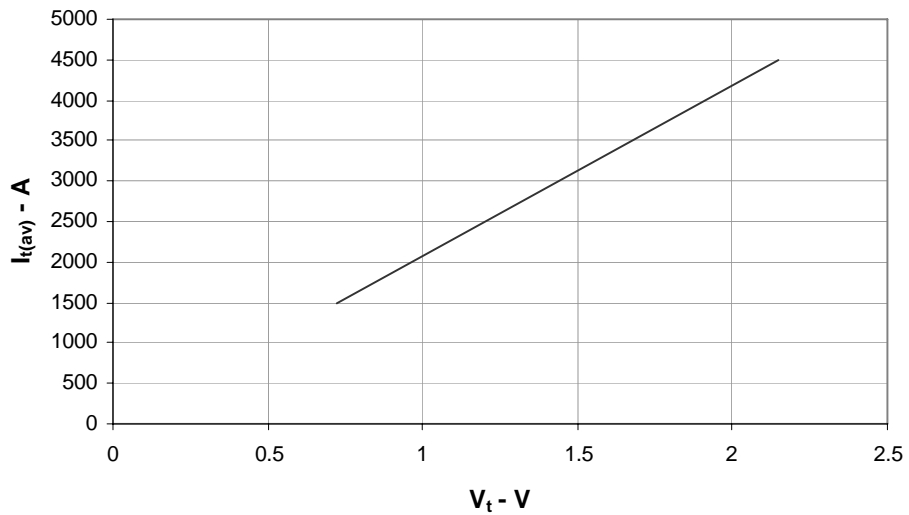




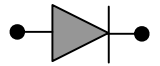
Transient Thermal Impedance Junction to Case



On State Characteristics



Capsule Type Rectifier Diode SHXXC1850



Ordering Information: -

SH	XX	C	1850
Hirect make Capsule Diode	$V_{RRM} = XX * 100$ e.g. 12 * 100 = 1200V	Capsule Diode	$I_{F(AV)} = 1850A$

Hind Rectifiers Ltd reserves the right to change the specifications without notice.

This datasheet specifies technical information for semiconductor devices but promises no characteristics. No warranty or guarantee expressed or implied is made regarding delivery, performance or suitability.

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