

PST-W3270NC180CAC

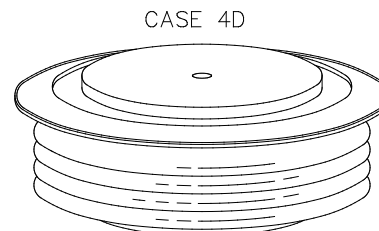
GENERAL PURPOSE HIGH POWER STANDARD RECTIFIER

Features:

- . All Diffused Structure
- . High Surge rating
- . Soft Reverse Recovery
- . Rugged Ceramic Hermetic Package
- . Pressure Assembled Device

Typical Applications:

- . Rectifier for Drives Applications
- . Medium voltage converters
- . Pulsed power applications
- . Crowbar Applications



ELECTRICAL CHARACTERISTICS AND RATINGS

Reverse Blocking

V_{RRM} (1)	V_{RSM} (1)
1800	1900

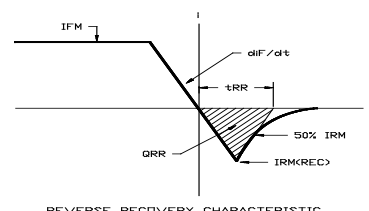
V_{RRM} = Repetitive peak reverse voltage

V_{RSM} = Non repetitive peak reverse voltage (2)

Repetitive peak reverse leakage	I_{RRM}	5 mA 50 mA
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Notes:

All ratings are specified for $T_j = 25^\circ\text{C}$ unless otherwise stated.



REVERSE RECOVERY CHARACTERISTIC

Conducting - on state

Parameter	Symbol	Min	Max.	Typ	Units	Conditions
Max. Average value of on-state current	$I_{F(AV)M}$		3270		A	Sinewave, 180° conduction, $T_c = 130^\circ\text{C}$
RMS value of on-state current	$I_{F(RMS)M}$		5949		A	Nominal value
Peak one cycle surge (non repetitive) current	I_{FSM}		30.4		kA	$T_j = 25^\circ\text{C}$, $V_R = 0.8V_{RRM}$, $t_p = 10\text{ms}$
I square t	I^2t		4.62×10^6		kA^2s	10 msec
Peak on-state voltage	V_{FM}		1.47		V	$I_{FM} = 6400\text{ A}$; $T_j = 25^\circ\text{C}$
Reverse Recovery Current (4)	$I_{RM(REC)}$		-		A	$I_{FM} = 1000\text{ A}$; $dI_F/dt = 10\text{ A}/\mu\text{s}$, $T_j = 160^\circ\text{C}$
Reverse Recovery Charge (4)	Q_{rr}		-		μC	
Reverse Recovery Time (4)	t_{RR}		-		μs	

* For guaranteed maximum values, contact factory

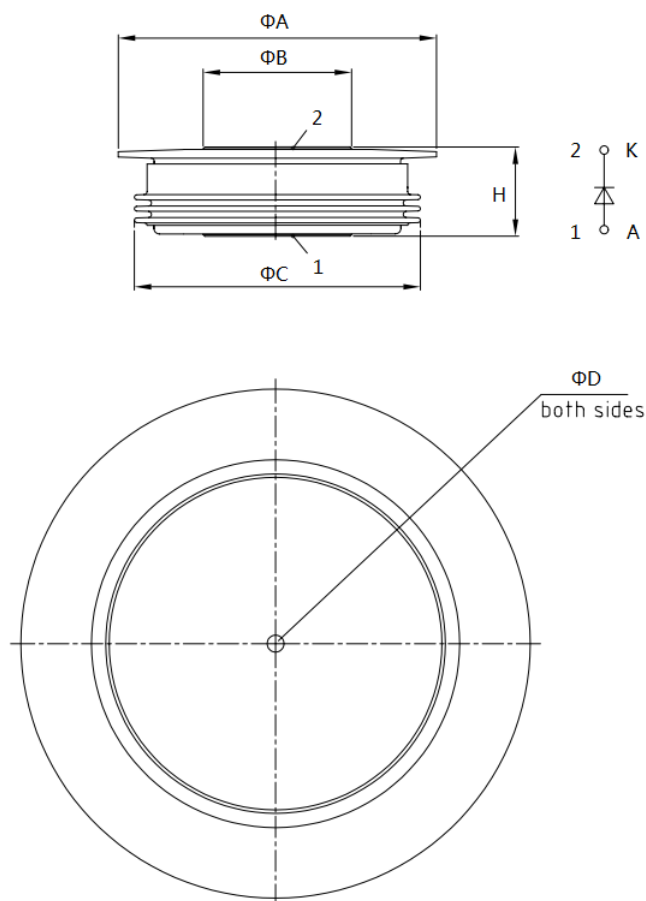
THERMAL AND MECHANICAL CHARACTERISTICS

Parameter	Symbol	Min.	Max.	Typ.	Units	Conditions
Operating temperature	T_j	-55	+175		$^\circ\text{C}$	
Storage temperature	T_{stg}	-55	+200		$^\circ\text{C}$	
Thermal resistance - junction to case	$R_{\theta(j-c)}$		-		K/kW	Double side cooled

Thermal resistance - case to sink	$R_{\Theta (c-s)}$		-		K/kW	Double side cooled
Thermal resistance - junction to sink	$R_{\Theta (j-s)}$		22		K/kW	Double side cooled
Mounting force	P	19	26		kN	
Weight	W			-	g	

* Mounting surfaces smooth, flat and greased

CASE OUTLINE AND DIMENSIONS



Sym	A	B	C	D	H
mm	75	47	66	3.5×3	26±1