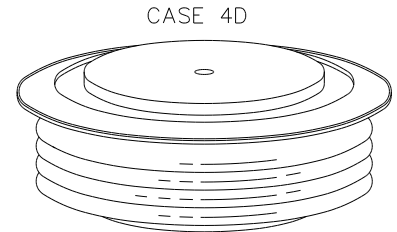


Standard Rectifier-----PST-D850N

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)
3600	3700

 V_{RRM} = Repetitive peak reverse voltage

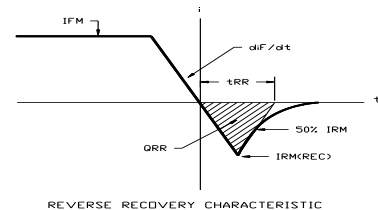
 V_{RSM} = Non repetitive peak reverse voltage (2)

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.

(1) All voltage ratings are specified for an applied 50Hz/60Hz sinusoidal waveform over the


Conducting - on state

Parameter	Symbol	Min	Max.	Typ	Units	Conditions
Max. Average value of on-state current	$I_{F(AV)M}$		1210		A	Sinewave, 180° conduction, $T_c=55^\circ\text{C}$
RMS value of on-state current	$I_{F(RMS)M}$		1790		A	Nominal value
Peak one cycle surge (non repetitive) current	I_{FSM}		15.4		kA	$T_j=25^\circ\text{C}$, $V_R=0,8V_{RRM}$, $t_p=10\text{ms}$
I square t	I^2t		1186		kA^2s	10 msec
Peak on-state voltage	V_{FM}		1.28		V	$I_{FM} = 850 \text{ A}$; $T_j = 160^\circ\text{C}$
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	

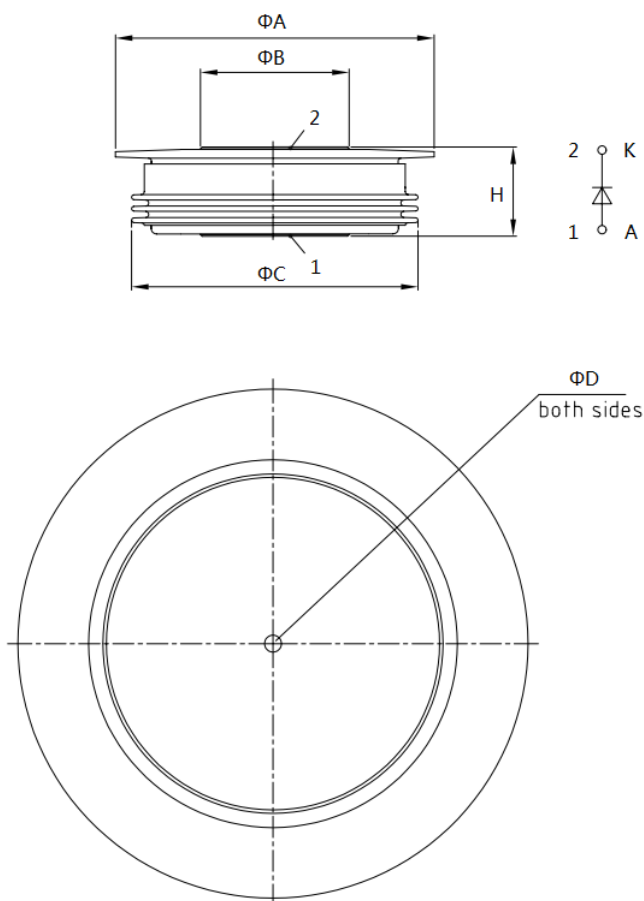
* For guaranteed maximum values, contact factory

THERMAL AND MECHANICAL CHARACTERISTICS

Parameter	Symbol	Min.	Max.	Typ.	Units	Conditions
Operating temperature	T_j	-40	+160		°C	
Storage temperature	T_{stg}	-40	+160		°C	
Thermal resistance - junction to case	$R_{\Theta(j-c)}$		38		°C /kW	
Thermal resistance - case to sink	$R_{\Theta(c-s)}$		5		°C /kW	
Thermal resistance - junction to sink	$R_{\Theta(j-s)}$		-		°C /kW	
Mounting force	P	10	24		kN	
Weight	W				g	

* Mounting surfaces smooth, flat and greased

CASE OUTLINE AND DIMENSIONS



Sym	A	B	C	D	H
mm	59	34	53	3.5x3	26±1