YZPST D471N900

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

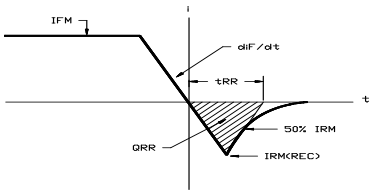
Reverse Blocking

V_{RRM} (1)	V_{RSM} (1)
9000	9100

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

Repetitive peak reverse leakage	I_{RRM}	10 mA 50mA

Notes:
All ratings are specified for Tj=25 °C unless otherwise stated.
(1) All voltage ratings are specified for an applied 50Hz/60zHz sinusoidal waveform over the temperature range -40 to +160 °C.
(2) 10 msec. max. pulse width
(3) Maximum value for Tj = 160 °C.



REVERSE RECOVERY CHARACTERISTIC

Conducting - on state

Parameter	Symbol	Min	Max.	Typ	Units	Conditions
Max. Average value of on-state current	$I_{F(AV)M}$		550		A	Sinewave,180°conduction,T_c=100°C
RMS value of on-state current	$I_{F(RMS)M}$		860		A	Nominal value T_c=100°C
Peak one cycle surge (non repetitive) current	I_{FSM}		11		kA	T_j=175°C, V_R=0,8V_{RRM}, t_p=10ms
I square t	I^2t		605		kA^2s	10 msec
Peak on-state voltage	V_F		3.20		V	I_F = 1200 A; Tj =160 °C
threshold voltage	V_{F0}		1.04		V	
slope resistance	r_T		1.80		mΩ	
Reverse Recovery Current (4)	$I_{RM(REC)}$		-		A	I_{FM} = 1000 A; dI_F/dt = 10 A/µs, Tj = 150 °C
Reverse Recovery Charge (4)	Q_{rr}		-	-	µC	
Reverse Recovery Time (4)	t_{RR}		-		µs	

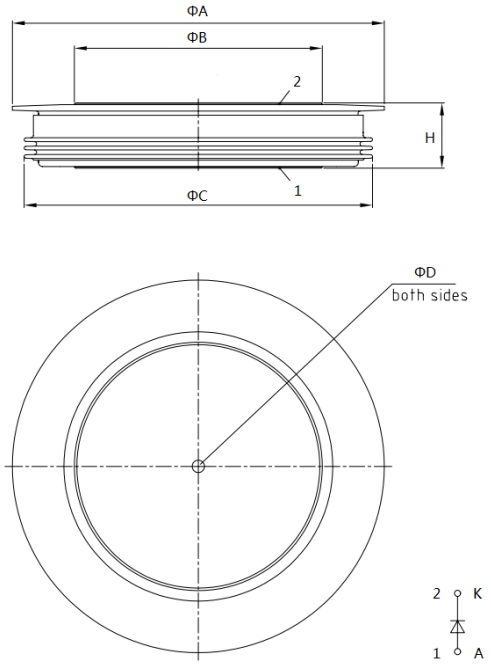
* For guaranteed maximum values, contact factory

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	$R_{\Theta(j\text{-}c)}$		31.5		K/KW	Double side cooling
Thermal resistance - case to sink	$R_{\Theta(c\text{-}s)}$		6		K/K/W	Double side cooling
Thermal resistance - junction to sink	$R_{\Theta(j\text{-}s)}$		-		K/kW	Double side cooling
Mounting force	P	10	16	-	kN	
Weight	W			250	g	about

* Mounting surfaces smooth, flat and greased

CASE OUTLINE AND DIMENSIONS



Sym	A	B	C	D	H
mm	59	34	53	3.5×3	26±1