

PST ZP2664

RECTIFIER DIODE

Features

- Blocking Capability up to 2800 V
- High Surge Rating
- Rugged Ceramic Hermetic Package

ELECTRICAL CHARACTERISTICS AND RATINGS

Blocking

Parameter	Symbol	Min	Max	Typ	Unit	Conditions
Repetitive peak reverse voltage	V_{RRM}		2800		V	$T_j = -40\text{ }^{\circ}\text{C}$ to $160\text{ }^{\circ}\text{C}$
Non repetitive peak reverse voltage	V_{RSM}		2900		V	$T_j = -40\text{ }^{\circ}\text{C}$ to $160\text{ }^{\circ}\text{C}$
Repetitive peak reverse current	I_{RRM}		100		mA	$T_j = T_{jmax}$, $V = V_{RRM}$

Conducting

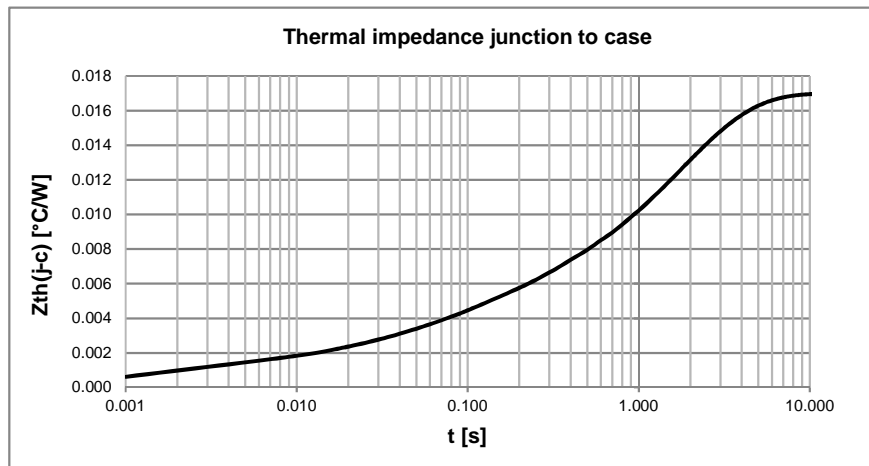
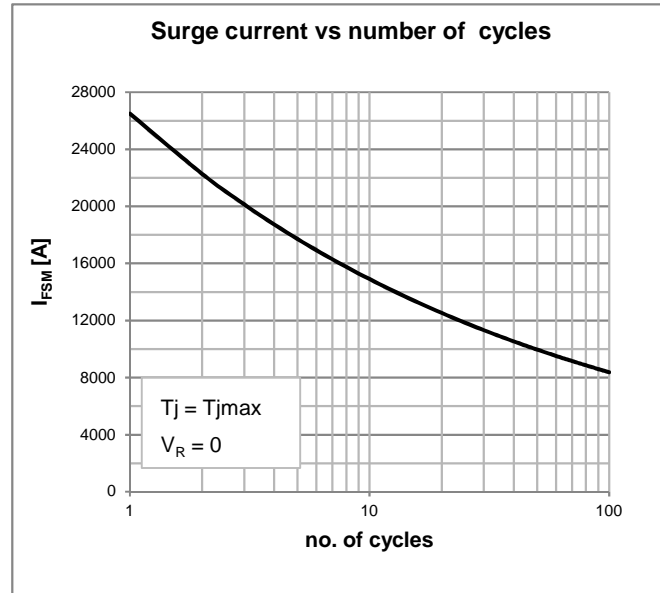
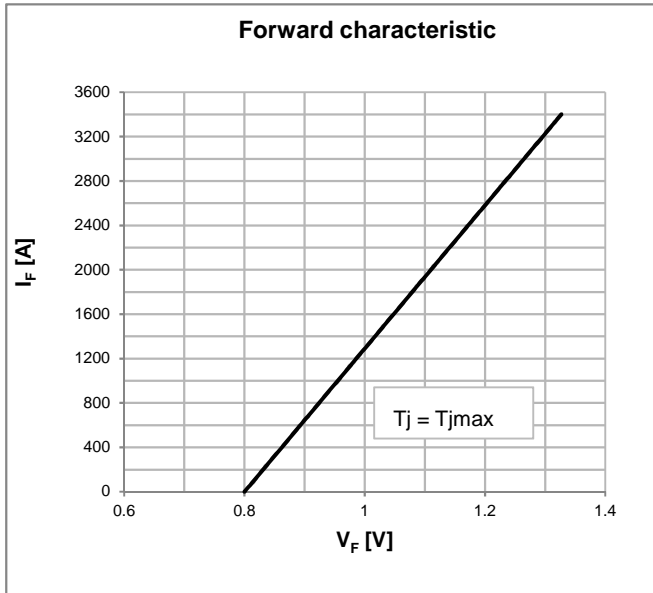
Parameter	Symbol	Min	Max	Typ	Unit	Conditions
Average value of forward current	$I_{F(AV)}$		2664		A	50 Hz sinewave, 180° conduction, $T_s = 55\text{ }^{\circ}\text{C}$
RMS value of forward current	$I_{F(RMS)}$		4180		A	
Peak one cycle surge (non repetitive) current	I_{FSM}		26.5		kA	50 Hz sinewave, 180° conduction, $T_j = T_{jmax}$, $V_R = 0$
I square t	$I^2 t$		3511		kA^2s	$T_j = T_{jmax}$
Peak forward voltage	V_{FM}		1.36		V	Forward current 3600 A, $T_j = T_{jmax}$
Threshold voltage	$V_{F(TO)}$		0.8		V	$T_j = T_{jmax}$
Forward slope resistance	r_F		0.16		$\text{m}\Omega$	$T_j = T_{jmax}$

Thermal and mechanical characteristics and ratings

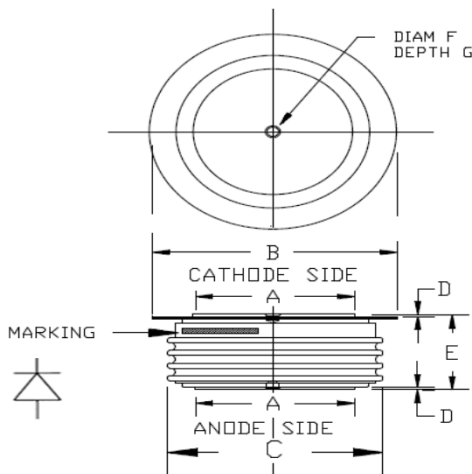
Parameter	Symbol	Min	Max	Typ	Unit	Conditions
Operating temperature	T_j	-40	160		$^{\circ}\text{C}$	
Storage temperature	T_{stg}	-40	160		$^{\circ}\text{C}$	
Thermal resistance junction to case	$R_{th(j-c)}$		0.017		$^{\circ}\text{C}/\text{W}$	DC operation
Thermal resistance case to sink	$R_{th(c-s)}$		0.005		$^{\circ}\text{C}/\text{W}$	Mounting surfaces smooth, flat and greased
Mounting force	F	24	26		kN	
Weight	W			460	g	

PST ZP2664

RECTIFIER DIODE



OUTLINE AND DIMENSIONS



OUTLINE DIMENSIONS - CASE 4D				
DIMENSIONS	Min. mm	Max. mm	Min. In.	Max. In.
DIAM A	43.18	48.26	1.70	1.90
DIAM B	63.50	75.18	2.50	2.96
DIAM C	--	67.31	--	2.65
D	0.76	--	0.03	--
E	25.40	27.18	1.00	1.07
F	3.30	3.81	0.13	0.15
G	1.78	2.03	0.07	0.08

STRIKE DISTANCE = .73 INCH / 18.5 MM MIN.
CREEPAGE DISTANCE = 1.17 INCH / 29.7 MM MIN.

- All the characteristics given in this data sheet are guaranteed only with uniform clamping force, cleaned and lubricated heatsink surfaces with flatness < 0.03 mm and roughness < 2µm