YZPST

Technical Data

PST ZP609LT

WELDING DIODE

Features

- Blocking Capability up to 400 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}		400		V	Tj = -40 °C to 190 °C
Non repetitive peak reverse voltage	V_{RSM}		500		V	Tj = -40 °C to 190 °C
Repetitive peak reverse current	I_{RRM}		60		mA	Tj = Tjmax , V = V_{RRM}

Conducting

Parameter	Symbol	Min	Max	Typ	Unit	Conditions
Average value of forward current	$I_{F(AV)}$		7590		A	50 Hz sinewave,180° conduction, Tc = 85 °C
RMS value of forward current	$I_{F(RMS)}$		11200		A	50 Hz sinewave,180° conduction, Tc = 85 °C
Peak one cycle surge (non repetitive) current	I_{FSM}		60		kA	50 Hz sinewave,180° conduction, Tj = Tjmax, VR = 0
I square t	I^2t		18000		kA^2s	Tj = Tjmax
Peak forward voltage	V_{FM}		0.90		V	Forward current 4500 A, Tj = Tjmax
Threshold voltage	$V_{F(TO)}$		0.74		V	Tj = Tjmax
Forward slope resistance	r_F		0.034		mΩ	Tj = Tjmax

Thermal and mechanical characteristics and ratings

Parameter	Symbol	Min	Max	Typ	Unit	Conditions
Operating temperature	T_j	-40	190		°C	
Storage temperature	T_{stg}	-40	190		°C	
Thermal resistance junction to case	$R_{th(j-c)}$		0.010		°C/W	Double side cooled, 180° SIN
Thermal resistance case to sink	$R_{th(c-s)}$		0.004		°C/W	Mounting surfaces smooth, flat and greased
Mounting force	F	19	26		kN	
Weight	W			200	g	

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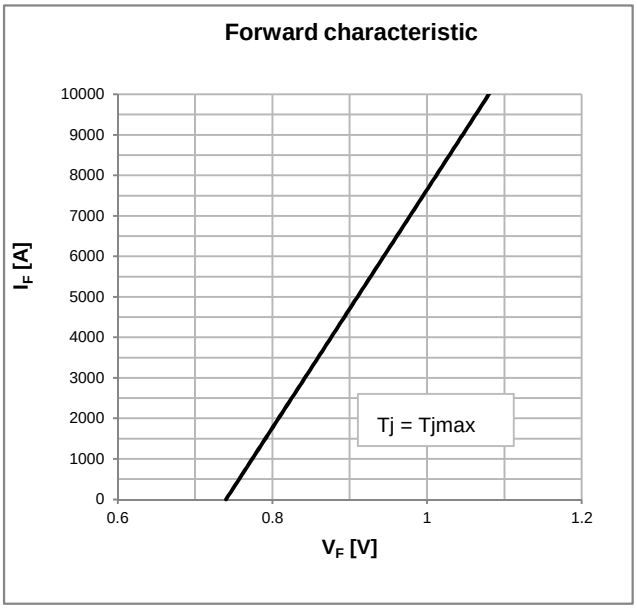
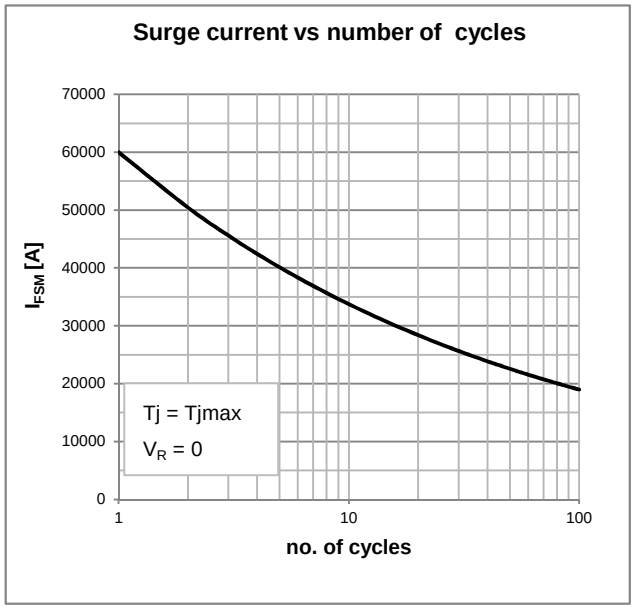
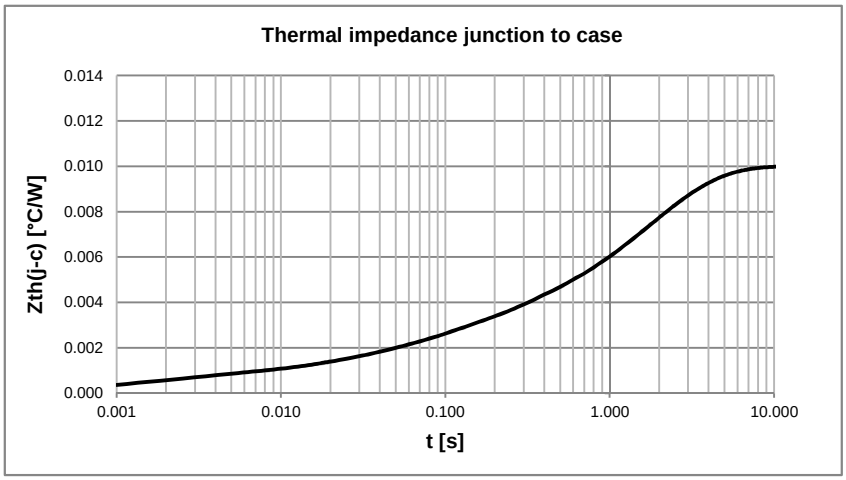
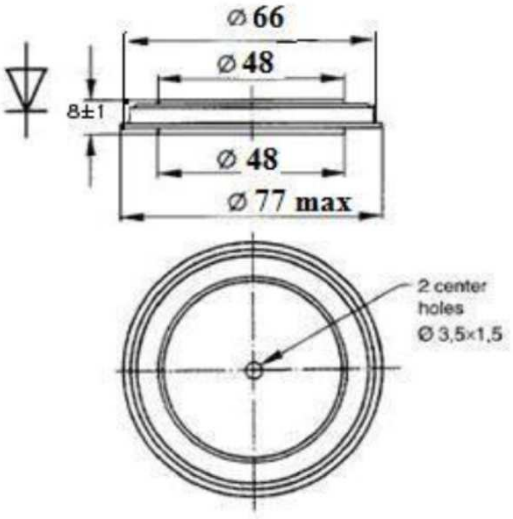






OUTLINE AND DIMENSIONS



- 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