

ZP5800 - RECTIFIER DIODE

Jiangsu Yangjie Runau Semiconductor Co.,Ltd

2500-3500V_{RRM}

GENERAL PURPOSE HIGH POWER STANDARD RECTIFIER

Features:

ZT110cT

- . All Diffused Structure
- . High Surge rating
- . Blocking capability up to 3500 volts
- . Ceramic Housing Hermetic Package
- . Pressure Assembled Device



ELECTRICAL CHARACTERISTICS AND RATINGS

Reverse Blocking

V_{RRM} = Repetitive peak reverse voltage

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

Repetitive peak reverse leakage	I _{RRM}	5 mA 200 mA (3)
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Conducting - on state

Parameter	Symbol	Min.	Max.	Typ.	Units	Conditions
Average forward current	I _{F(AV)}		5800		A	Sinewave, 180°, T _c = 90
RMS forward current	I _{FRMS}		9106		A	Nominal value
Peak one cycle surge (non repetitive) current	I _{FSM}		81200		A	10 msec (50Hz), sinusoidal wave-shape, 180° conduction, T _j = 160
I square t	I ² t		3.3 · 10 ⁷			10

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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_{jc}		0.006		°C/W	Double sided cooled
Thermal resistance - case to heatsink	R_{cs}		0.0015		°C/W	Double sided cooled
Mounting force	P	65	85	80	kN	
Weight	W			1.9	kg.	