



R U N A U

Jiangsu Runau Electronics Manufacturing Co.,Ltd

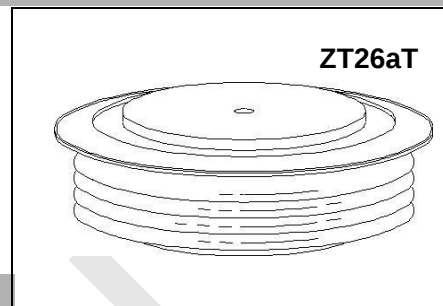
ZP200-Rectifier Diode

2500 - 3500 V_{RRM}

GENERAL PURPOSE HIGH POWER STANDARD RECTIFIER

Features:

- . 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

Device Type	V_{RRM} (1)	V_{RSM} (1)
ZP200-25	2500	2700
ZP200-26	2600	2800
ZP200-28	2800	3000
ZP200-30	3000	3200
ZP200-32	3200	3400
ZP200-35	3500	3700

Notes:

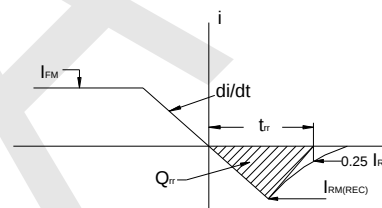
All ratings are specified for $T_j = 25^\circ\text{C}$, unless otherwise stated

(1) All voltage ratings are specified for an applied 50Hz/60Hz sinusoidal waveform over the temperature range 0 to $+150^\circ\text{C}$.

(2) 10 msec. max. pulse width

(3) Maximum value for $T_j = 150^\circ\text{C}$.

(4) See parameter definition below :



REVERSE RECOVERY CHARACTERIST

V_{RRM} = Repetitive peak reverse voltage

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

Repetitive peak reverse leakage current	I_{RRM}	2 mA 30 mA (3)
---	-----------	-------------------

Conducting - on state

Parameter	Symbol	Min.	Max.	Typ.	Units	Conditions
Average forward current	$I_{F(AV)}$		200		A	Sinewave 180° , $T_c = 100^\circ\text{C}$
RMS forward current	I_{FRMS}		314		A	Nominal value
Peak one cycle surge (non repetitive) current	I_{FSM}		2800		A	10 msec (50Hz), sinusoidal wave-shape, 180° conduction, $T_j = 150^\circ\text{C}$
I square t	I^2t		4×10^4		A^2s	10 msec
Peak forward voltage	V_{FM}		1.55		V	$I_{FM} = 600\text{A}$; $T_j = 25^\circ\text{C}$
Threshold voltage	V_{FO}		0.88		V	$T_j = 150^\circ\text{C}$, $I = 0.5\pi I_{F(AV)}$ to $1.5\pi I_{F(AV)}$
Slope resistance	r_F		0.80		m Ω	$T_j = 150^\circ\text{C}$, $I = 0.5\pi I_{F(AV)}$ to $1.5\pi I_{F(AV)}$
Reverse Recovery Current (4)	$I_{RM(REC)}$				A	$I_{FM} = 500\text{A}$; $di/dt = -10\text{A/s}$; T_{jmax}
Reverse Recovery Charge (4)	Q_{rr}			1500	μC	$I_{FM} = 500\text{A}$; $di/dt = -10\text{A/s}$; T_{jmax}
Reverse Recovery Time (4)	t_{rr}				μs	$I_{FM} = 500\text{A}$; $di/dt = -10\text{A/s}$; T_{jmax}

Parameter	Symbol	Min.	Max.	Typ.	Units	Conditions
Operating temperature	T_j	-40	+150		$^{\circ}\text{C}$	
Storage temperature	T_{stg}	-40	+150		$^{\circ}\text{C}$	
Thermal resistance - junction to case	$R_{\Theta(j-c)}$		0.08		$^{\circ}\text{C/W}$	Double sided cooled
Thermal resistance - case to heatsink	$R_{\Theta(c-s)}$		0.02		$^{\circ}\text{C/W}$	Double sided cooled
Mounting force	P	3.5	4.5	4	kN	
Weight	W			0.06	kg.	

* Mounting surfaces smooth, flat and greaseless

CASE OUTLINE AND DIMENSIONS

