



ZP2000- RECTIFIER DIODE

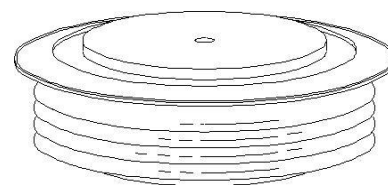
2600-3600V_{RRM}

GENERAL PURPOSE HIGH POWER STANDARD RECTIFIER

Features:

- . All diffused structure
- . High surge rating
- . Blocking capability up to 3600 volts
- . Ceramic housing hermetic package
- . Pressure assembled device

D10C



ELECTRICAL CHARACTERISTICS AND RATINGS

Reverse Blocking

Device Type	V _{RRM} (1)	V _{RSM} (1)
ZP2000-26	2600	2700
ZP2000-28	2800	2900
ZP2000-30	3000	3100
ZP2000-32	3200	3300
ZP2000-34	3400	3500
ZP2000-36	3600	3700

V_{RRM} = Repetitive peak reverse voltage

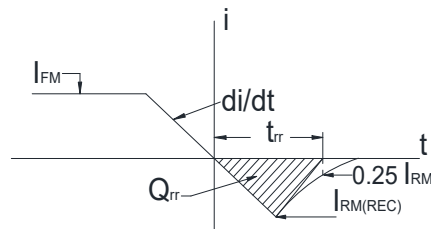
V_{RSM} = Non repetitive peak reverse voltage (2)

Repetitive peak reverse leakage current	I _{RRM}	5 mA 60 mA (3)
---	------------------	-------------------

Notes:

All ratings are specified for T_j=25 °C, unless otherwise stated

- (1) All voltage ratings are specified for an applied 50Hz/60Hz sinusoidal waveform over the temperature range 0 to +150 °C.
- (2) 10 msec. max. pulse width
- (3) Maximum value for T_j = 150 °C.
- (4) See parameter definition below :



reverse recovery characteristic

Conducting - on state

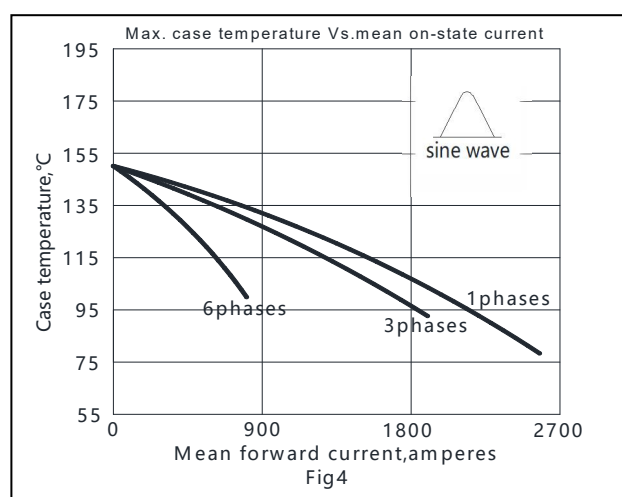
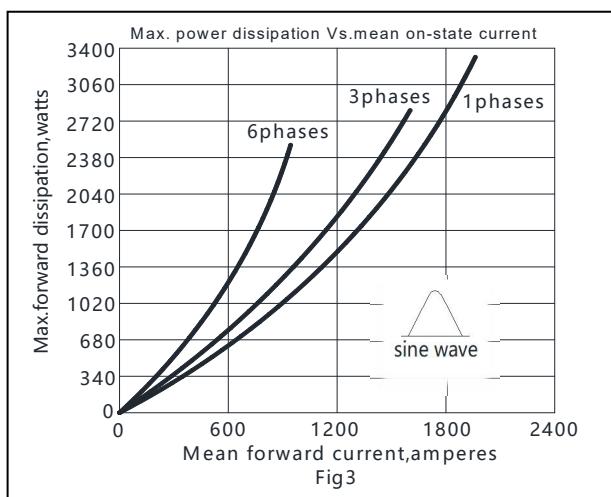
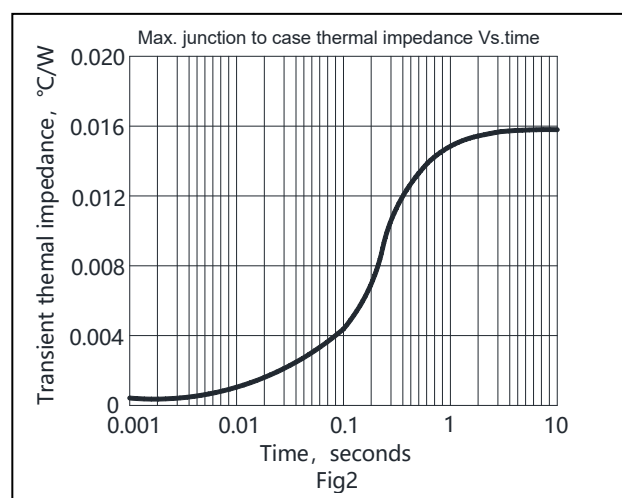
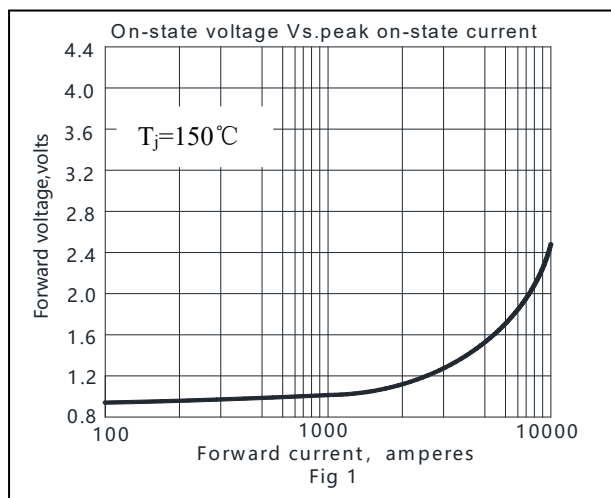
Parameter	Symbol	Min.	Max.	Typ.	Units	Conditions
Average forward current	I _{F(AV)}		2000		A	Sinewave 180°, T _c =100°C
RMS forward current	I _{FRMS}		3140		A	Nominal value
Peak one cycle surge (non repetitive) current	I _{FSM}		28000		A	10 msec (50Hz), sinusoidal wave-shape, 180° conduction, T _j =150°C
I square t	I ² t		4 × 10 ⁶		A ² s	10 msec
Peak forward voltage	V _{FM}		1.55		V	I _{FM} = 3000A; T _j =25°C
Threshold voltage	V _{FO}		0.86		V	T _j =150°C, I=0.5 π I _{F(AV)} to 1.5 π I _{F(AV)}
Slope resistance	r _F		0.16		mΩ	T _j =150°C, I=0.5 π I _{F(AV)} to 1.5 π I _{F(AV)}
Reverse Recovery Current (4)	I _{RM(REC)}				A	I _{FM} = 500 A; di/dt = -10 A/s; T _{jmax}
Reverse Recovery Charge (4)	Q _{rr}			5000	μC	I _{FM} = 500 A; di/dt = -10 A/s; T _{jmax}
Reverse Recovery Time (4)	t _{rr}				μs	I _{FM} = 500 A; di/dt = -10 A/s; T _{jmax}

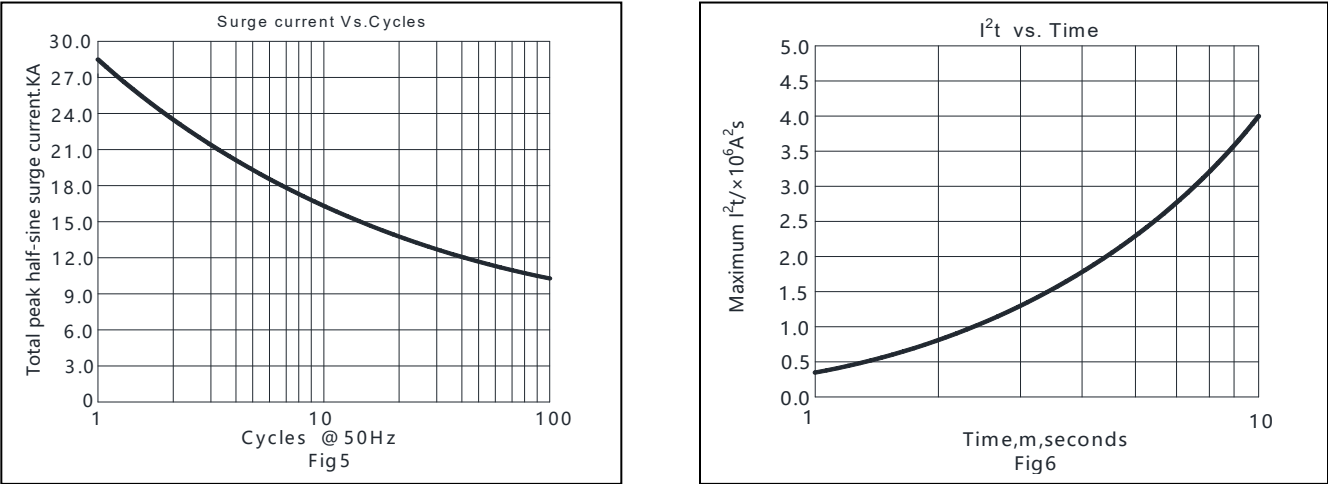
Parameter	Symbol	Min.	Max.	Typ.	Units	Conditions
Operating temperature	T_j	-40	+150		°C	
Storage temperature	T_{stg}	-40	+150		°C	
Thermal resistance - junction to case	$R_{\theta(j-c)}$		0.015		°C/W	Double sided cooled
Thermal resistance - case to heatsink	$R_{\theta(c-s)}$		0.0045		°C/W	Double sided cooled
Mounting force	F	27	33	30	kN	
Weight	m			0.72	kg.	

* Mounting surfaces smooth, flat and greaseless

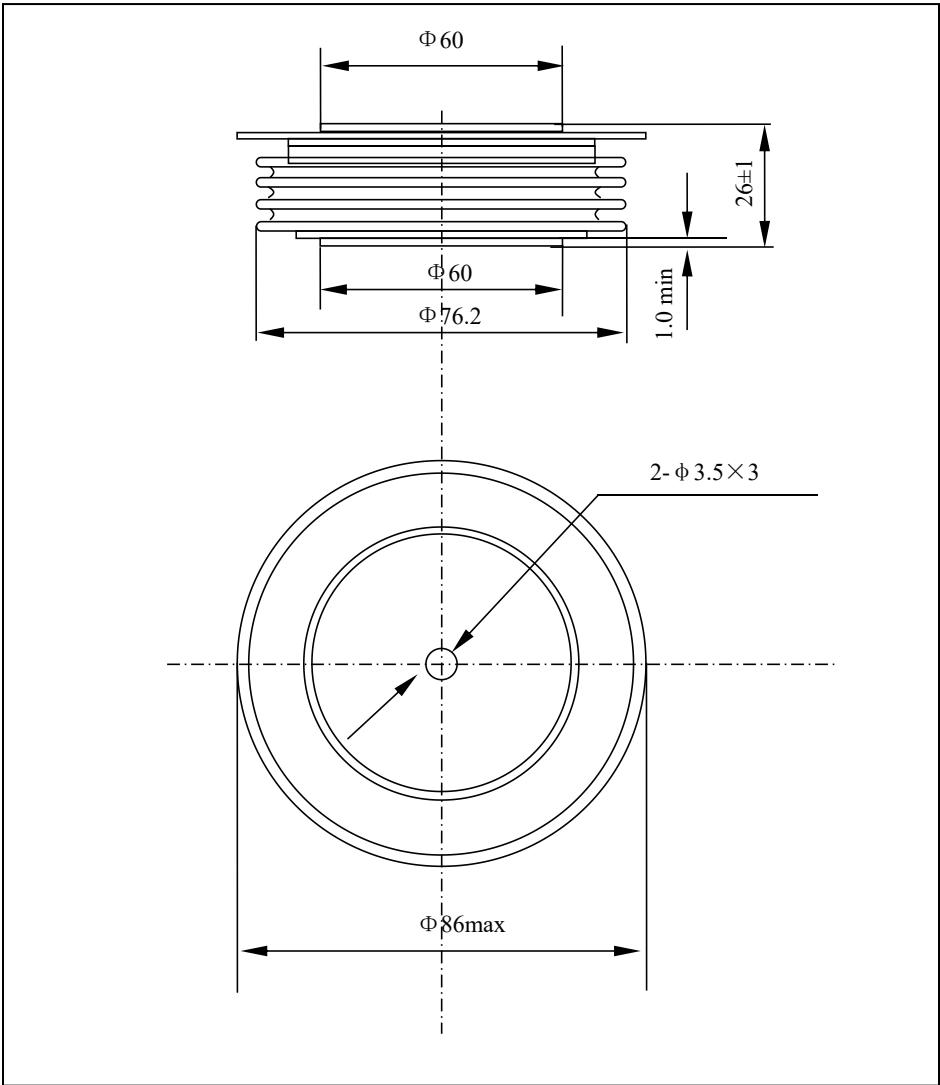
Graph

ZP2000-RECTIFIER DIODE





CASE OUTLINE AND DIMENSIONS



The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function, or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of which would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website <http://www.21yangjie.com> , or consult your nearest Yangjie's sales office for further assistance.