

ZK500-RECTIFIER DIODE

Jiangsu Yangjie Runau Semiconductor Co.,Ltd

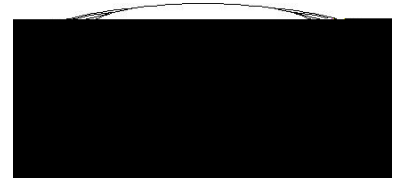
1000-1800 V_{RRM}

FAST RECOVERY RECTIFIER DIODE

Features:

ZT36cT

- . All diffused structure
- . High surge rating
- . Blocking capability up to 1800 volts
- . Soft recovery
- . 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 current	I _{RRM}	15 mA 35 mA (3)
---	------------------	--------------------

Conducting - on state

Parameter	Symbol	Min.	Max.	Typ.	Units	Conditions
Average forward current	I _{F(AV)}		500		A	Sinewave 180°, T _c = 70°C
RMS forward current	I _{FRMS}		785		A	
Peak one cycle surge (non repetitive) current	I _{FSM}		7500		A	10 msec (50Hz), sinusoidal wave-shape, 180° conduction, T _j = 125°C
I square t	I ² t		2.8x10 ⁵		A ² s	8.3 msec and 10.0 msec
Peak forward voltage	V _{FM}		2.30		V	I _{FM} = 1500A; Duty cycle 0.01%

Parameter	Symbol	Min.	Max.	Typ.	Units	Conditions
Operating temperature	T_j	-40	+125		°C	
Storage temperature	T_{stg}	-40	+125		°C	
Thermal resistance - junction to case	$R_{\theta(j-c)}$		0.045		°C/W	Double sided cooled (1) @ 2000 lb.; (2) @800 lb.
Thermal resistance - junction to case	$R_{\theta(j-c)}$		0.090		°C/W	Single sided cooled (1) @ 2000 lb.; (2) @800 lb.
Thermal resistance - case to heatsink	$R_{\theta(c-h)}$		0.010 0.020		°C/W	Double sided cooled * Single sided cooled *
Mounting force	P			13	kN	
Weight	W			200	g	

* Mounting surfaces smooth, flat and greaseless

CASE OUTLINE AND DIMENSIONS

