

ZK1200-RECTIFIER DIODE

Jiangsu Yangjie Runau Semiconductor Co.,Ltd

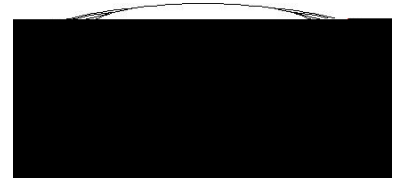
1000-1800 V_{RRM}

FAST RECOVERY RECTIFIER DIODE

Features:

ZT55cT

- . 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 50 mA (3)
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Conducting - on state

Parameter	Symbol	Min.	Max.	Typ.	Units	Conditions
Average forward current	I _{F(AV)}		1200		A	Sinewave 180°, T _c = 70°C
RMS forward current	I _{FRMS}		1884		A	
Peak one cycle surge (non repetitive) current	I _{FSM}		18000		A	10 msec (50Hz), sinusoidal wave-shape, 180° conduction, T _j = 125°C
I square t	I ² t		1620000		A ² s	8.3 msec and 10.0 msec
Peak forward voltage	V _{FM}		2.20		V	I _{FM} = 3000A; Duty cycle 0.01%
Reverse Recovery Current (4)	I _{RM(REC)}		*		A	I _{FM} = 1000 A; dI _F /dt = 10 A/ s; T _j max

Reverse Recovery Charge (4) Q

Parameter	Symbol	Min.	Max.	Typ.	Units	Conditions
Operating temperature	T_j	-40	+125		°C	
Storage temperature	T_{stg}	-40	+140		°C	
Thermal resistance - junction to case	R_{-c}		0.022		°C/W	Double sided cooled (1) @ 2000 lb.; (2) @800 lb.
Thermal resistance - junction to case	R_{-c}		0.044		°C/W	Single sided cooled (1) @ 2000 lb.; (2) @800 lb.
Thermal resistance - case to heatsink	R_{-s}		0.005 0.010		°C/W	Double sided cooled * Single sided cooled *
Mounting force	P			25	kN	
Weight	W			460	g	

* Mounting surfaces smooth, flat and greaseless

CASE OUTLINE AND DIMENSIONS