USR Semiconductor Co., Ltd

F02-XX00
FAST RECOVERY DIODE

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T_j(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Double side cooled,Ths=55°C	150			472	A
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Double side cooled,Ths=90°C	150			332	A
V_{RRM}	Repetitive peak reverse voltage	V_{RRM} tp=10ms V_{RsM}= V_{RRM}+100V	150	1100		2000	V
I_{RRM}	Repetitive peak current	at V_{RRM}	150			16	mA
I_{FSM}	Surge forward current	10ms half sine wave V_R=0.6V_{RRM}	150			2.7	KA
I^2T	I^2T for fusing coordination					40	A^2s*10^3
V_{FO}	Threshold voltage		150			1.48	V
r_F	Forward slop resistance					0.65	mΩ
V_{FM}	Peak on-state voltage	I_{TM}=600A, F=5.0KN	150			1.87	V
I_{rm}	Reverse recovery current	I_{TM}=600A,tp=1000μs, -di/dt=40A/μs, V_R=50V	150		50		A
t_{rr}	Reverse recovery time				2.0		μs
Q_{rr}	Recovery charge				50	70	μC
$R_{th(j-h)}$	Thermal resistance Junction to heatsink	At 180^0 sine double side cooled Clamping force 5.0KN	150			0.090	°C /W
F_m	Mounting force			3.3		5.5	KN
T_{stg}	Stored temperature			-40		160	°C
W_t	Weight				50		g
Outline	ZT19aT						

Outline