USR Semiconductor Co., Ltd

Bi06-XX00
Bi-DIRECTIONAL
THYRISTOR

SYMBOL	**CHARACTERISTIC**	**TEST CONDITIONS**	**T_j(°C)**	**VALUE**			**UNIT**
				Min	**Type**	**Max**	
$I_{T(RMS)}$	RMS current	50Hz sine wave Double side cooled,T_{hs}=55°C	125			1058	A
$I_{T(RMS)}$	RMS current	50Hz sine wave Double side cooled,T_{hs}=80°C	125			794	A
V_{RRM}	Repetitive peak reverse voltage	V_{RRM} tp=10ms V_{RSM}= V_{DRM}&V_{RRM}+100V	125	500		1800	V
I_{RRM}	Repetitive peak current	at V_{RRM}	125			40	mA
I_{TSM}	Surge on-state current	10ms half sine wave V_R=0.6V_{RRM}	125			4.2	KA
I^2T	I^2T for fusing coordination					88	A^2s*10^3
V_{TO}	Threshold voltage		125			0.90	V
r_T	On-state slop resistance					1.02	mΩ
V_{TM}	Peak on-state voltage	I_{TM}=900A, F=15KN	125			1.821	V
dv/dt	Critical rate of rise of off-state voltage	V_{DM}=0.67V_{DRM}	125			50	V/µs
di/dt	Critical rate of rise of on-state current	From 67%V_{DRM} to 1500A, Gate source 1.5A t_r ≤0.5µs Repetitive	125			50	A/µs
I_{GT}	Gate trigger current	V_A=12V, I_A=1A	25	20		300	mA
V_{GT}	Gate trigger voltage			0.8		3.0	V
I_H	Holding current			20		300	mA
$R_{th(j-h)}$	Thermal resistance Junction to heatsink	At 180^0 sine’ double side cooled Clamping force 15KN				0.035	°C /W
F_m	Mounting force			10		20	KN
T_{stg}	Stored temperature			-40		140	°C
W_t	Weight				270		g
Outline	KT33cT						

Outline