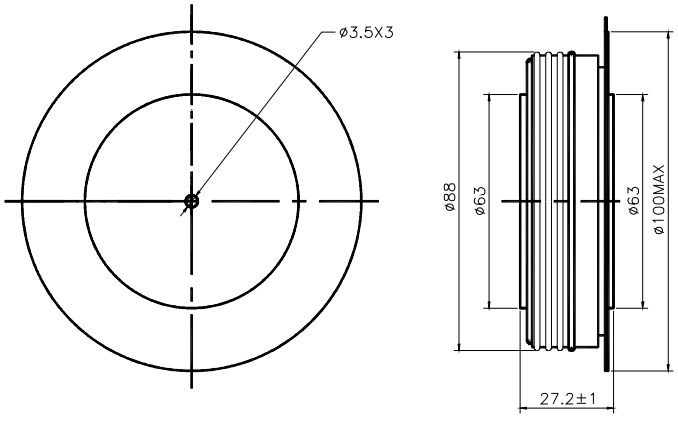
USR Semiconductor Co., Ltd

D20-XX00
RECTIFIER 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,T_{hs}=55°C	150			3098	A
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Double side cooled,T_{hs}=90°C	150			2289	A
V_{RRM}	Repetitive peak reverse voltage	V_{RRM} tp=10ms V_{RsM}= V_{RRM}+100V	150	3100		3800	V
I_{RRM}	Repetitive peak current	at V_{RRM}	150			160	mA
I_{FSM}	Surge forward current	10ms half sine wave V_R=0.6V_{RRM}	150			40.3	KA
I^2T	I^2T for fusing coordination					8110	A^2s*10^3
V_{FO}	Threshold voltage		150			0.85	V
r_F	Forward slop resistance					0.14	mΩ
V_{FM}	Peak on-state voltage	I_{TM}=5400A, F=35KN	150			1.61	V
I_{rm}	Reverse recovery current	I_{TM}=1000A,tp=1000μs, di/dt=-40A/μs,V_R=50V	150			180	A
t_{rr}	Reverse recovery time					7.6	μs
Q_{rr}	Recovery charge					684	μC
$R_{th(j-h)}$	Thermal resistance Junction to heatsink	At 180^0 sine, double side cooled Clamping force 35KN				0.016	°C /W
F_m	Mounting force			30		40	KN
T_{stg}	Stored temperature			-40		160	°C
W_t	Weight				900		g
Outline	ZT60cT70						

Outline



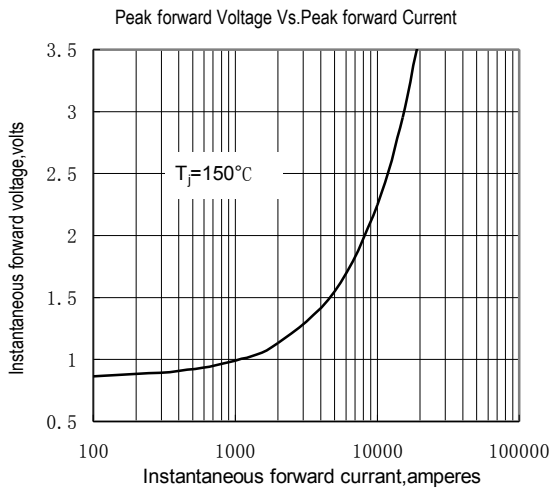


Fig.1

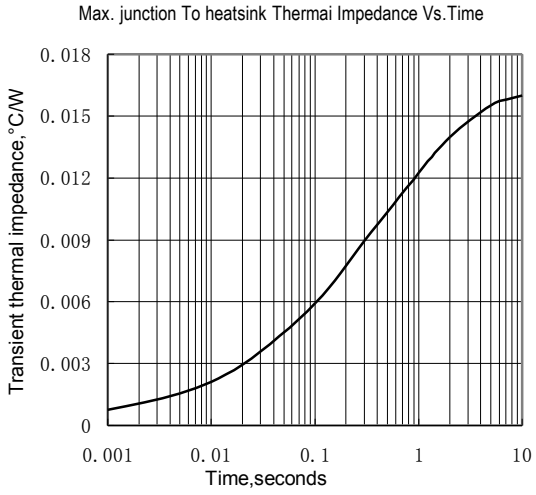


Fig.2

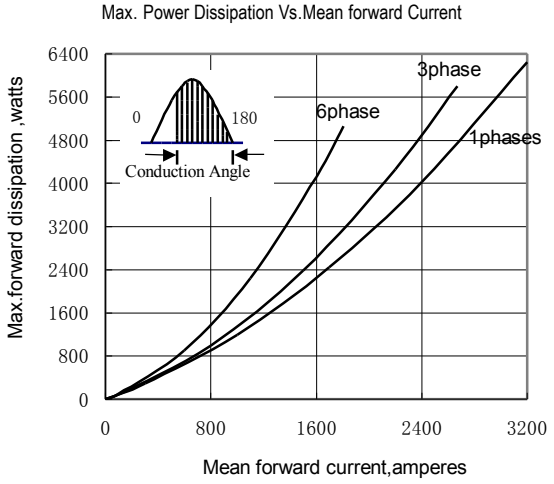


Fig.3

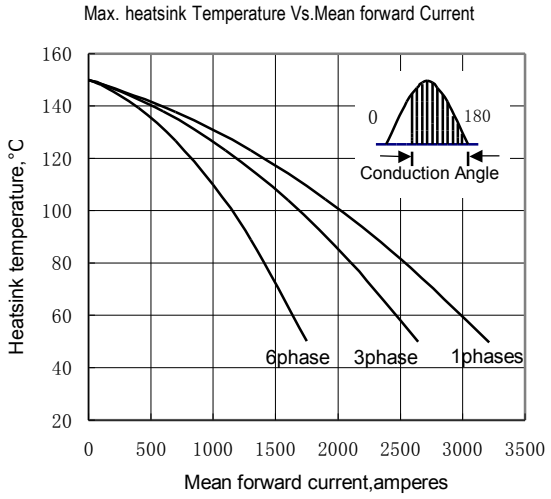


Fig.4

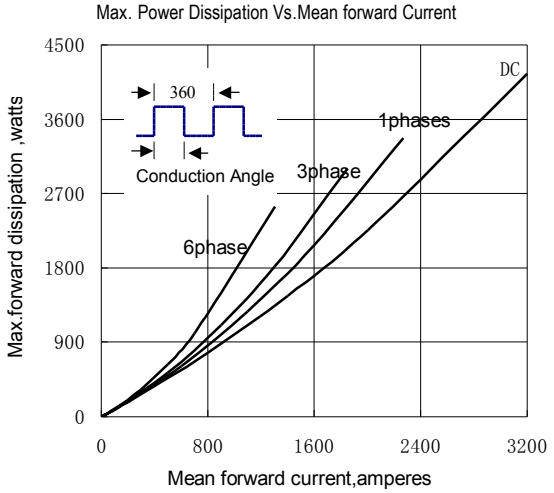


Fig.5

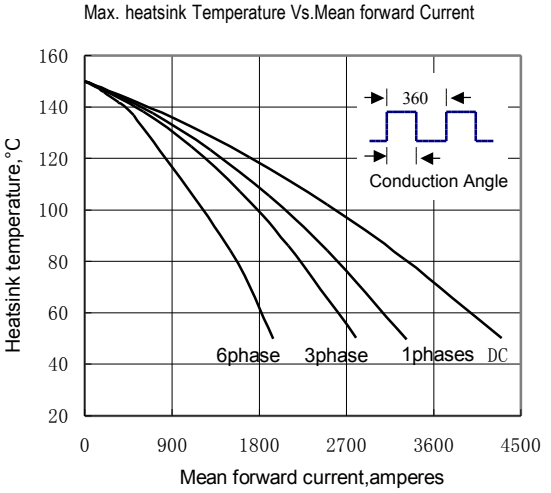


Fig.6