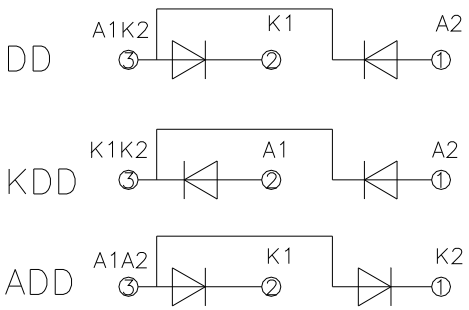
USR Semiconductor Co., Ltd

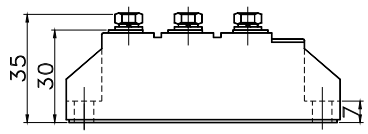
DIODE
MODULE

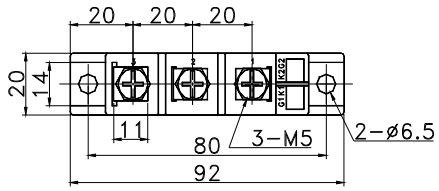
DD40 ADD40 KDD40

SYMBOL	CHARACTERISTIC	TEST CONDITIONS	T_j(°C)	VALUE			UNIT
				Min	Type	Max	
$I_{F(AV)}$	Mean forward current	180° half sine wave 50Hz Single side cooled,T_C=100°C	150			40	A
$I_{F\ (RMS)}$	RMS forward current	Single side cooled,T_C=100°C	150			63	A
V_{RRM}	Repetitive peak reverse voltage	V_{RRM} tp=10ms V_{RsM}= V_{DRM}&V_{RRM}+200V	150	600		1800	V
I_{RRM}	Repetitive peak current	at V_{RRM}	150			8	mA
I_{FSM}	Surge forward current	10ms half sine wave V_R=0.6V_{RRM}	150			1.00	KA
I^2t	I^2T for fusing coordination					5.1	A^2s*10^3
V_{FO}	Threshold voltage		150			0.80	V
r_F	Forward slop resistance					5.57	mΩ
V_{FM}	Peak forward voltage	I_{FM}=120A	25			1.55	V
$R_{th(j-c)}$	Thermal resistance Junction to heatsink	At 180^0 sine' Single side cooled				0.900	°C /W
V_{iso}	Isolation voltage	50Hz,R.M.S,t=1min,I_{iso}:1mA(max)		2500			V
F_m	Terminal connection torque(M5)				2.0		N·m
	Mounting torque(M6)				3.0		N·m
T_{stg}	Stored temperature			-40		125	°C
W_t	Weight				100		g
Outline	201F3						

OUTLINE DRAWING & CIRCUIT DIAGRAM







Peak forward Voltage Vs.Peak forward Current

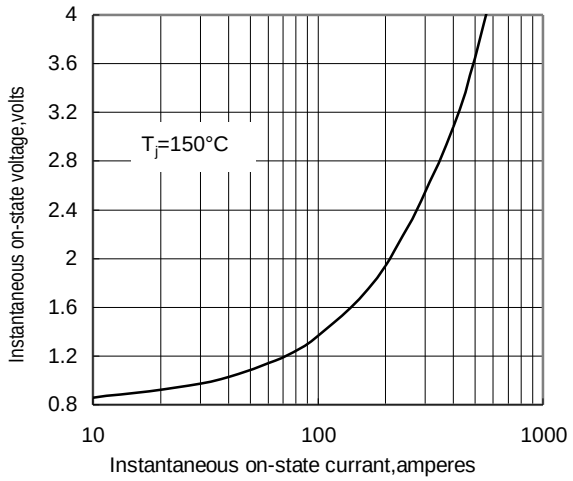


Fig.1

Max. junction To case Thermai Impedance

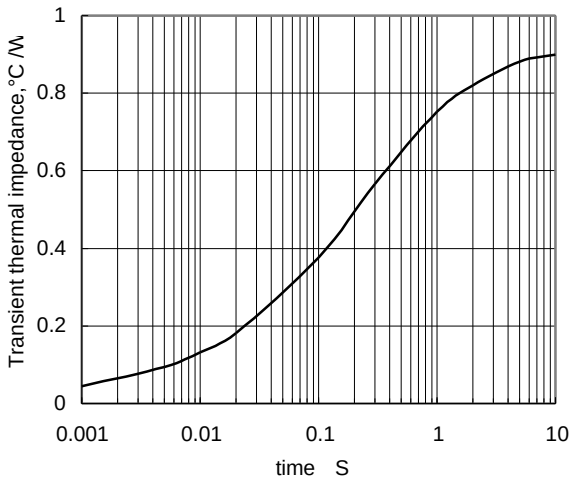


Fig.2

Max. Power Dissipation Vs.Mean forward Current

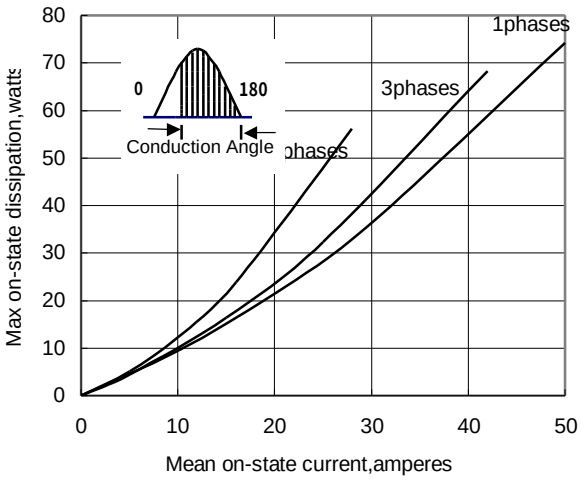


Fig.3

Max. case Temperature Vs.Mean forward Current

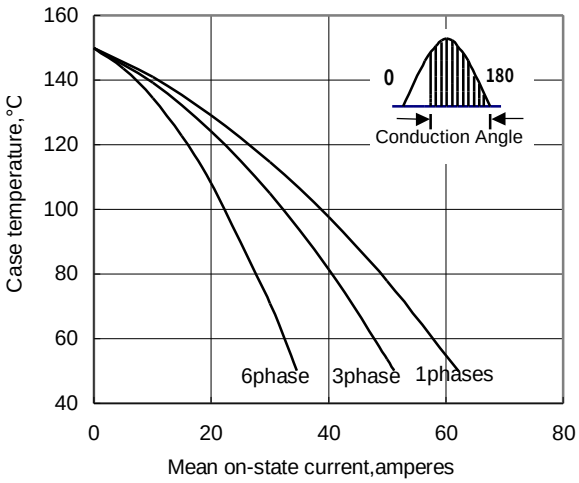


Fig.4

Max. Power Dissipation Vs.Mean forward Current

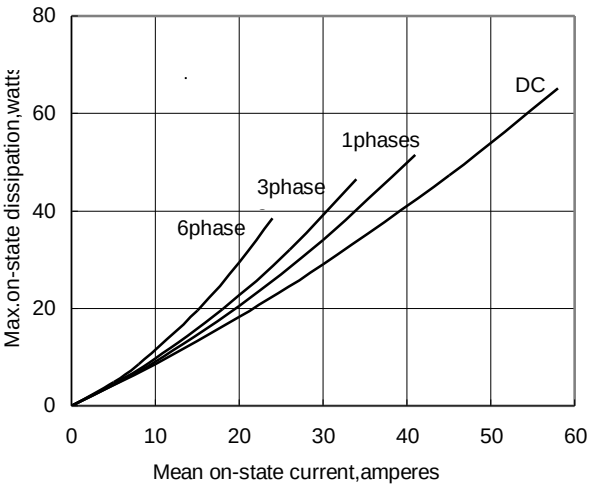


Fig.5

Max. case Temperature Vs.Mean forward Current

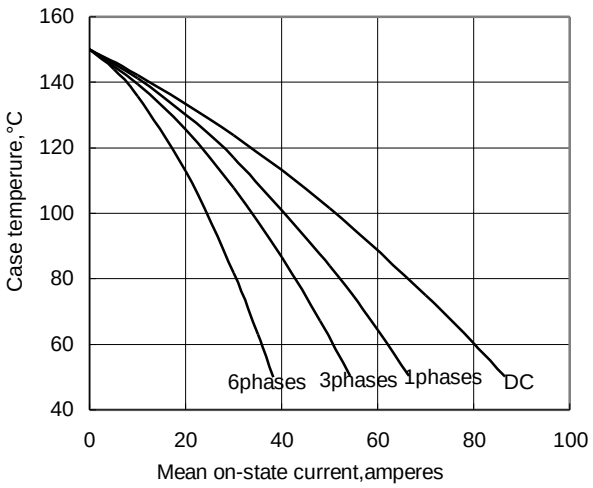


Fig.6