

Features

- Center amplifying gate
- Metal case with ceramic insulator
- Low on-state and switching losses

$I_{T(AV)}$ **920A**
 V_{DRM}/V_{RRM} **4600 ~ 5500V**

Typical Applications

- AC controllers
- DC and AC motor control
- Controlled rectifiers

I_{TSM} **12 kA**
 I^2t **703 10³A²S**

SYMBOL	CHARACTERISTIC	TEST CONDITIONS		T _J (°C)	VALUE			UNIT
					Min	Type	Max	
I _{T(AV)}	Mean on-state current	180° half sine wave 50Hz Double side cooled,	T _C =70°C	125			920	A
V _{DRM} V _{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	tp=10ms		125	4600		5500	V
I _{DRM} I _{RRM}	Repetitive peak current	at V _{DRM} at V _{RRM}		125			200	mA
I _{TSM}	Surge on-state current	10ms half sine wave		125			12	kA
I ² t	I ² t for fusing coordination	V _R =0.6V _{RRM}					703	A ² s*10 ³
V _{TO}	Threshold voltage			125			1.07	V
r _T	On-state slope resistance						0.83	mΩ
V _{TM}	Peak on-state voltage	I _{TM} =1000A, F=24kHz		25			1.90	V
dv/dt	Critical rate of rise of off-state voltage	V _{DM} =0.67V _{DRM}		125			2000	V/μs
di/dt	Critical rate of rise of on-state current	V _{DM} = 67%V _{DRM} to 2000A, Gate pulse tr ≤0.5μs I _{GM} =2.0A		125			150	A/μs
Q _r	Recovery charge	I _{TM} =2000A, tp=4000μs, di/dt=-5A/μs, V _R =100V		125		2500		μC
I _{GT}	Gate trigger current	V _A =12V, I _A =1A		25	40		300	mA
V _{GT}	Gate trigger voltage				0.8		3.0	V
I _H	Holding current				25		200	mA
I _L	Latching current						500	mA
V _{GD}	Non-trigger gate voltage	V _{DM} =0.67V _{DRM}		125			0.3	V
R _{th(j-c)}	Thermal resistance Junction to case	D.C. double side cooled Clamping force 24.0kN					0.020	°C/W
R _{th(c-h)}	Thermal resistance case to heatsink						0.005	°C/W
F _m	Mounting force				19	24	26	kN
T _{vj}	Junction temperature				-40		125	°C
T _{stg}	Stored temperature				-40		140	°C
W _t	Weight					440		g
Outline	P11							

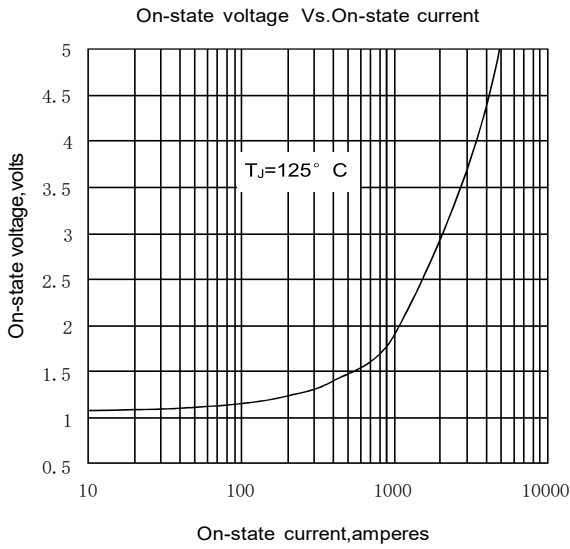


Fig.1

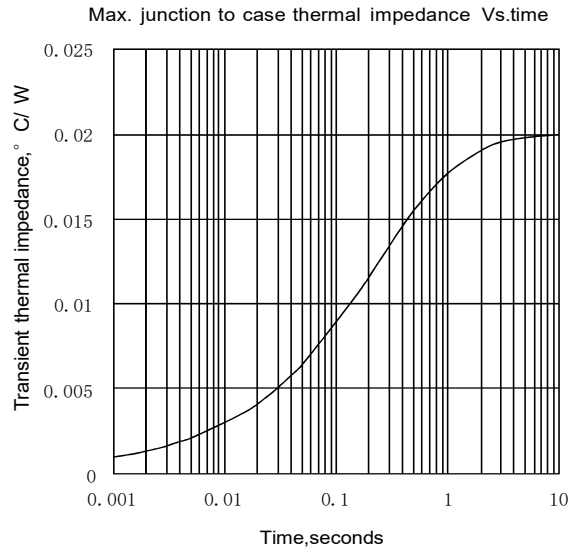


Fig.2

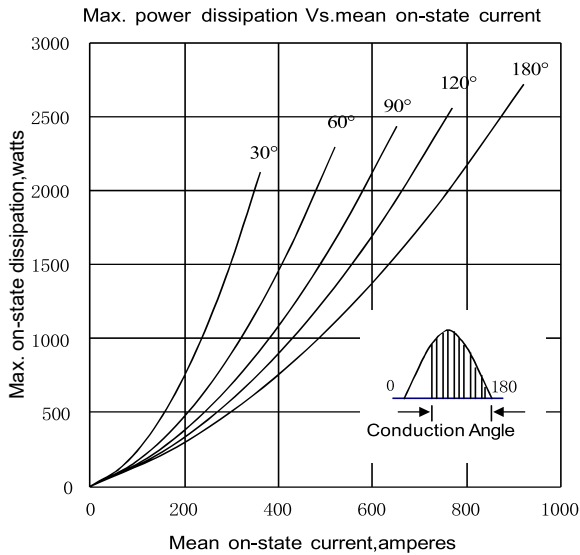


Fig.3

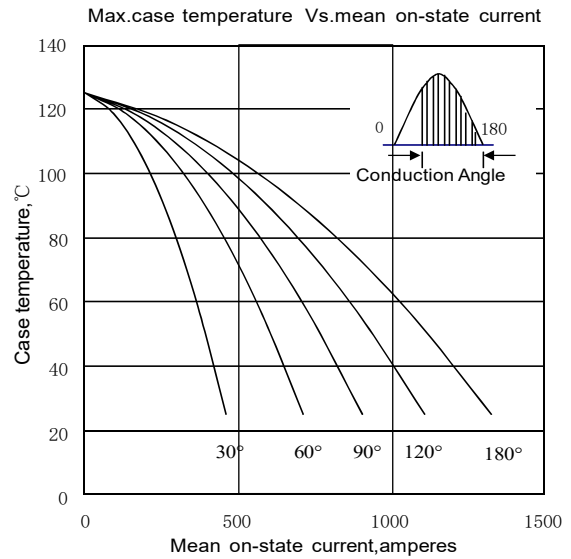


Fig.4

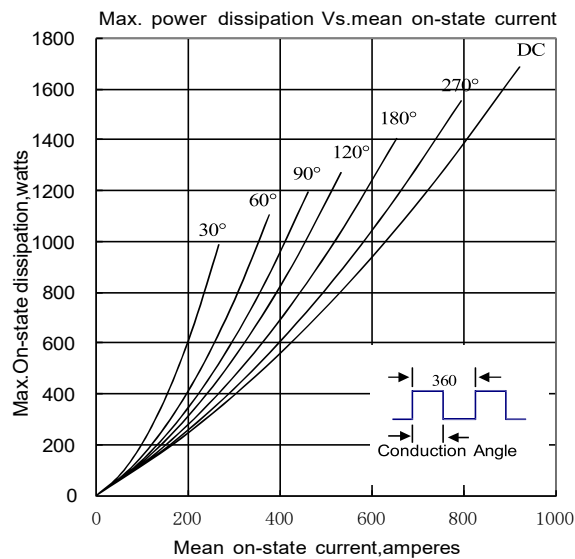


Fig.5

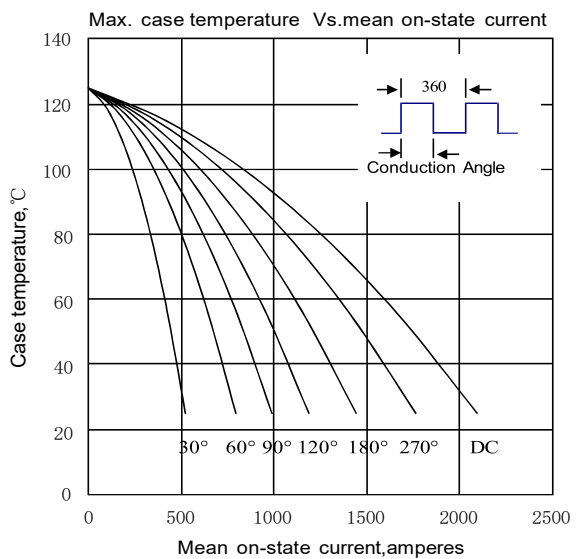


Fig.6

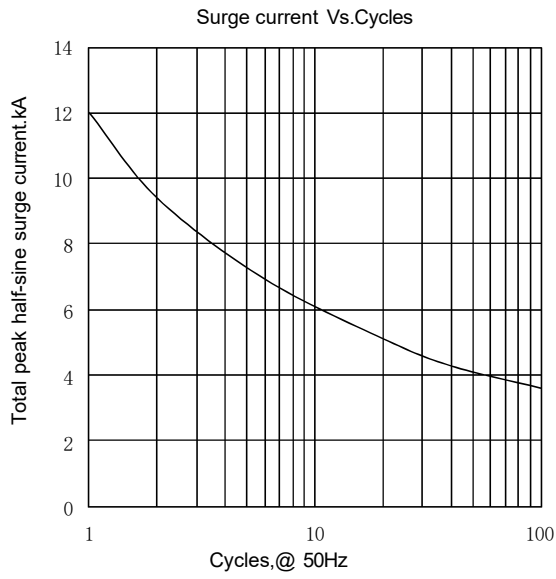


Fig.7

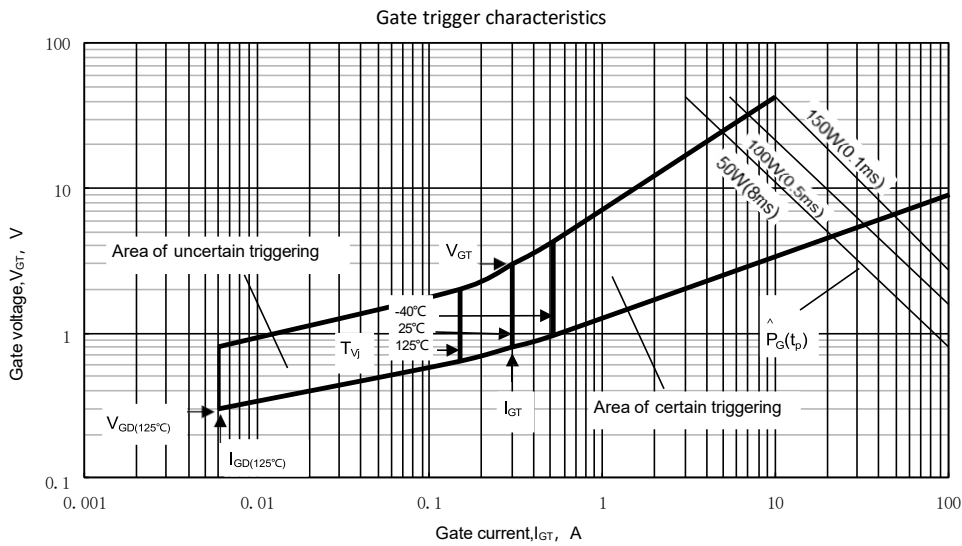


Fig.8

Outline:

