

Features

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

Typical Applications

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

$I_{T(AV)}$	2070 A
V_{DRM}/V_{RRM}	1900-3000V
I_{TSM}	28 kA
I^2t	3920 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			2070	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	tp=10ms		125	1900		3000	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}		125			160	mA
I_{TSM}	Surge on-state current	10ms half sine wave		125			28	kA
I^2t	I ² t for fusing coordination	V _R =0.6V _{RRM}					3920	A ² s*10 ³
V_{TO}	Threshold voltage			125			1.07	V
r_T	On-state slope resistance						0.19	mΩ
V_{TM}	Peak on-state voltage	I _{TM} =4000A, F=35kN		25			1.83	V
dv/dt	Critical rate of rise of off-state voltage	V _{DM} =0.67V _{DRM}		125			1000	V/μs
di/dt	Critical rate of rise of on-state current	V _{DM} = 67%V _{DRM} to 2500A, Gate pulse t _r ≤0.5μs I _{GM} =1.5A		125			250	A/μs
Q _{rr}	Recovery charge	I _{TM} =2000A, tp=2000μs, di/dt=-20A/μs, V _R =50V		125		2000		μC
I_{GT}	Gate trigger current			25	40		300	mA
V_{GT}	Gate trigger voltage	V _A =12V, I _A =1A			0.8		3.0	V
I_H	Holding current				20		300	mA
V_{GD}	Non-trigger gate voltage	V _{DM} =67%V _{DRM}		125	0.3			V
$R_{th(j-c)}$	Thermal resistance Junction to case	DC double side cooled					0.0120	°C/W
$R_{th(c-h)}$	Thermal resistance case to heatsink	Clamping force 35.0kN					0.0035	
F_m	Mounting force				30		40	kN
T _{stg}	Stored temperature				-40		140	°C
W _t	Weight					880		g
Outline	P15							

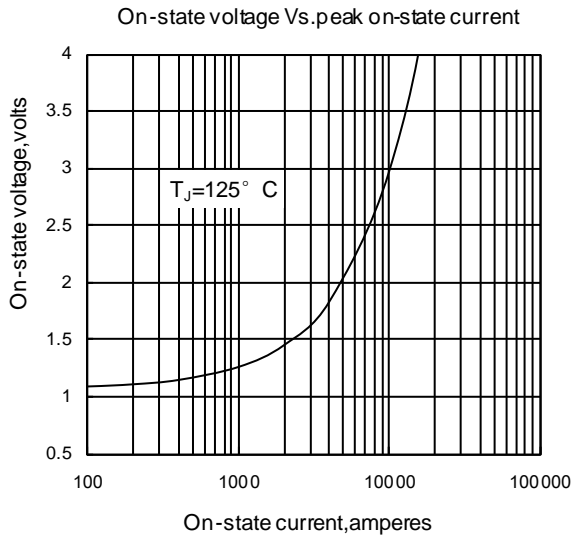


Fig1

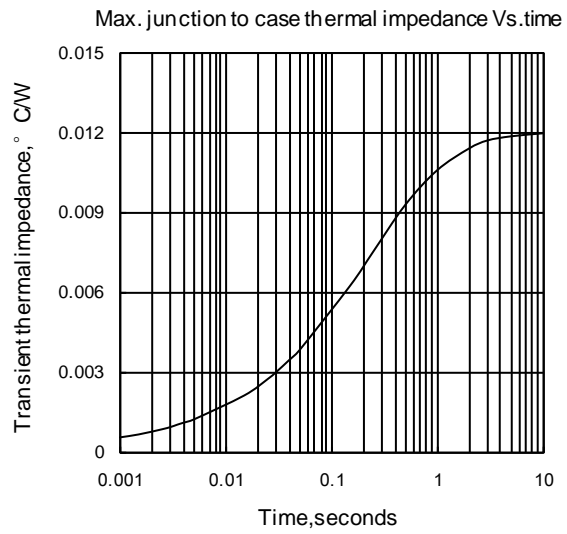


Fig2

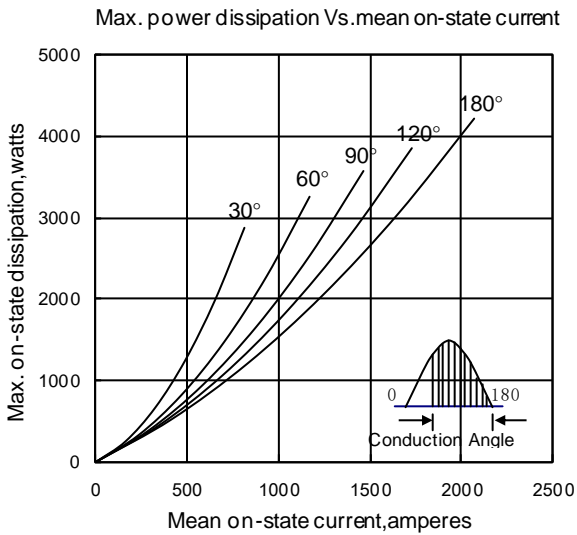


Fig3

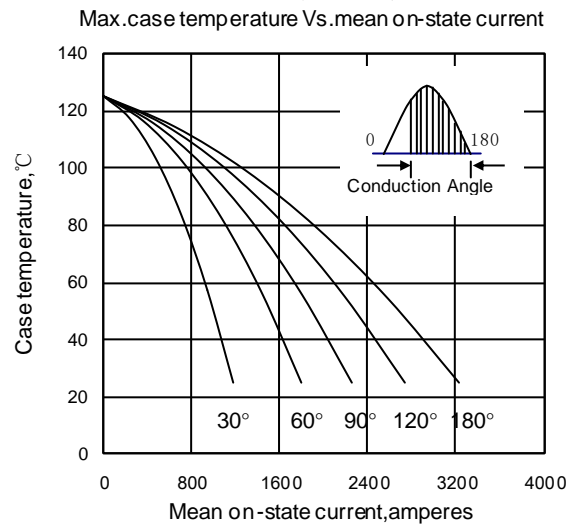


Fig4

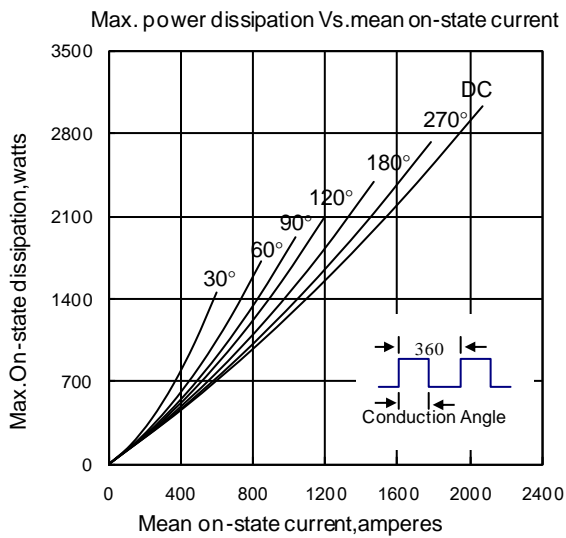


Fig5

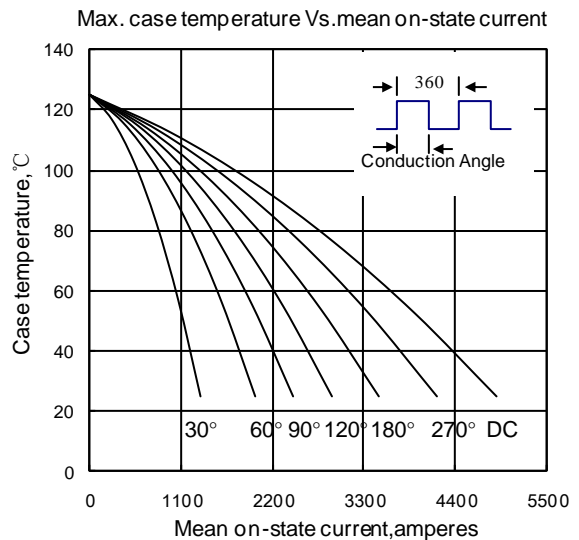


Fig6

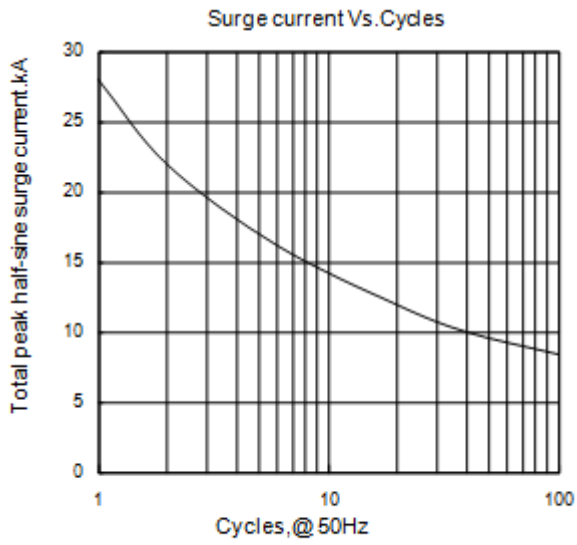


Fig7

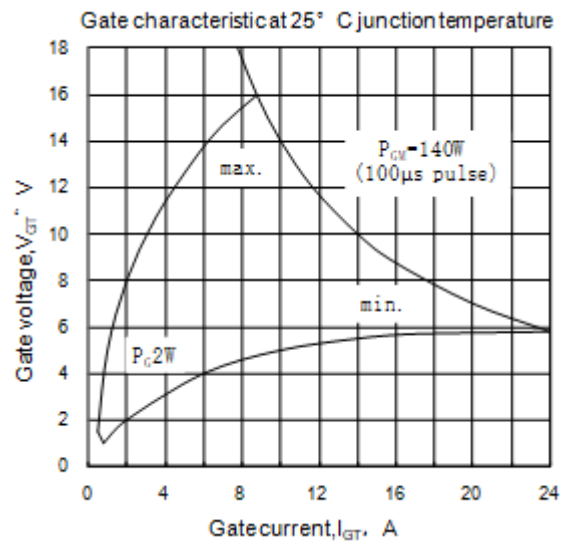


Fig8

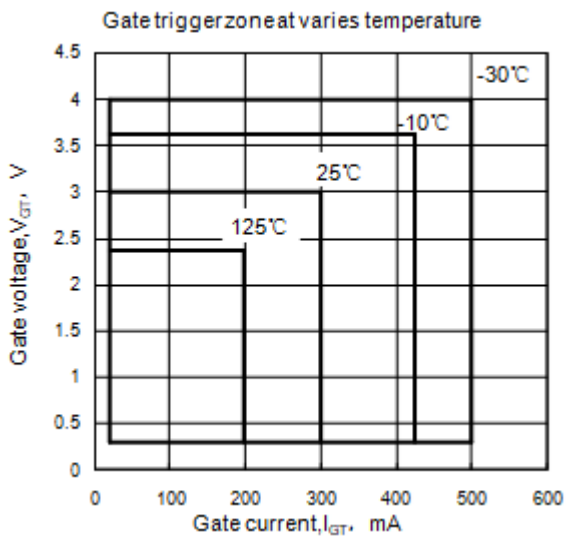
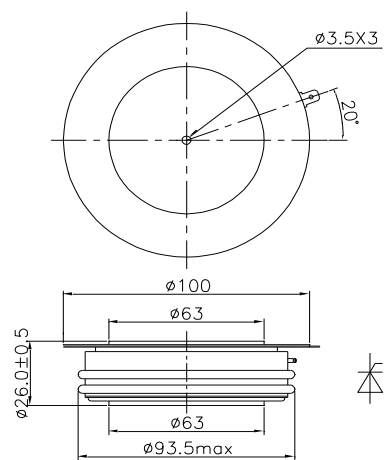


Fig9



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