

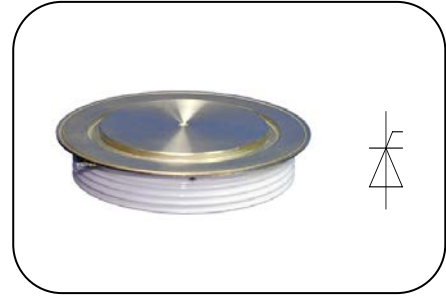
Features

- Interdigitated amplifying gates
- Fast turn-on and high di/dt
- Low switching losses

Typical Applications

- Inductive heating
- Electronic welders
- Self-commutated inverters

$I_{T(AV)}$	3330A
V_{DRM}/V_{RRM}	1900~2500V
t_q	40~110μs
I_{TSM}	44 kA
I^2t	9680 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 =55°C	125			3330	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	tp=10ms	125	1900		2500	V
I_{DRM} I_{RRM}	Repetitive peak current	at V_{DRM} at V_{RRM}	125			250	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			44	kA
I^2t	I ² t for fusing coordination	V _R =0.6V _{RRM}				9680	A ² s*10 ³
V_{TO}	Threshold voltage		125			1.29	V
r_T	On-state slope resistance					0.21	mΩ
V_{TM}	Peak on-state voltage	I _{TM} =5000A, F=70kN	125			2.34	V
dv/dt	Critical rate of rise of off-state voltage	V _{DM} =0.67V _{DRM}	125			500	V/μs
di/dt	Critical rate of rise of on-state current	V _{DM} = 67%V _{DRM} , to4000A Gate pulse t _r ≤0.5μs I _{GM} =1.5A	125			1200	A/μs
Q _{rr}	Recovery charge	I _{TM} =2000A, tp=2000μs, di/dt=-60A/μs, V _R =50V	125		2100		μC
t _q	Circuit commutated turn-off time	I _{TM} =2000A, tp=2000μs, V _R =50V dv/dt=30V/μs , di/dt=-60A/μs	125	40		110	μs
I_{GT}	Gate trigger current	V _A =12V, I _A =1A	25	40		450	mA
V_{GT}	Gate trigger voltage			0.9		4.5	V
I_H	Holding current			20		1000	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	At 180° sine double side cooled Clamping force 70 kN				0.007	°C/W
$R_{th(c-h)}$	Thermal resistance case to heat sink					0.002	
F_m	Mounting force			63		84	kN
T _{stg}	Stored temperature			-40		140	°C
W_t	Weight					1390	g
Outline							

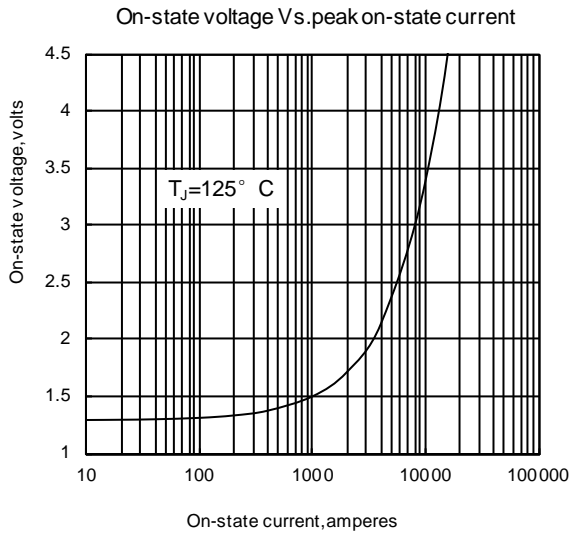


Fig1

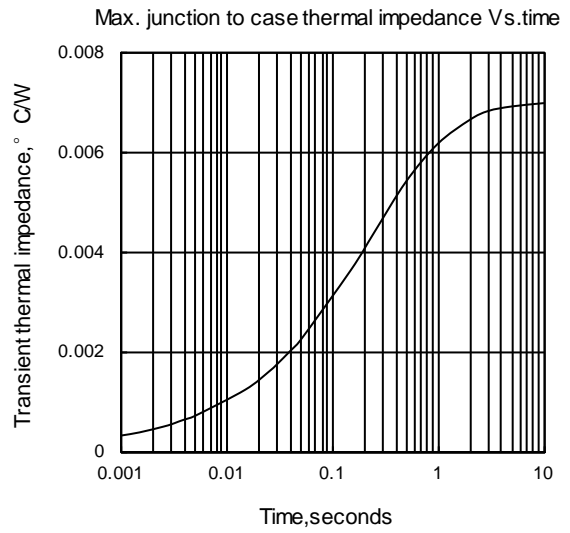


Fig2

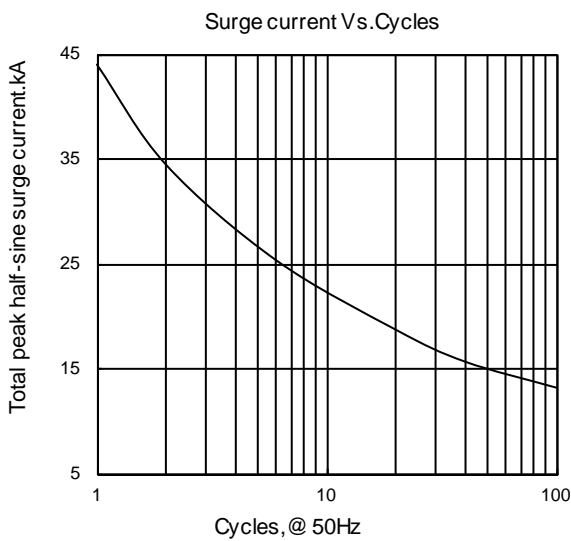


Fig3

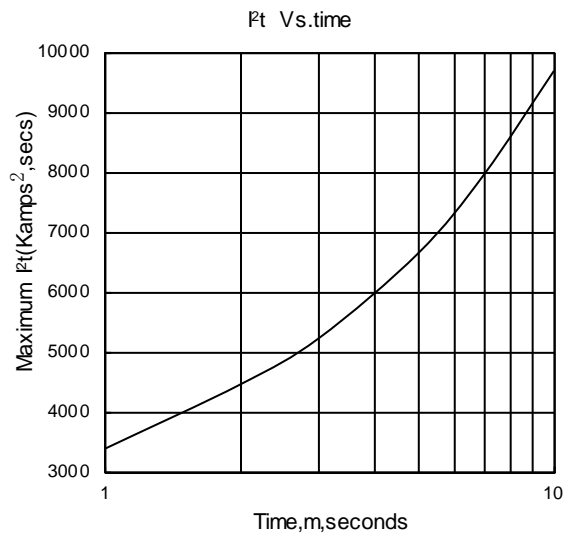


Fig4

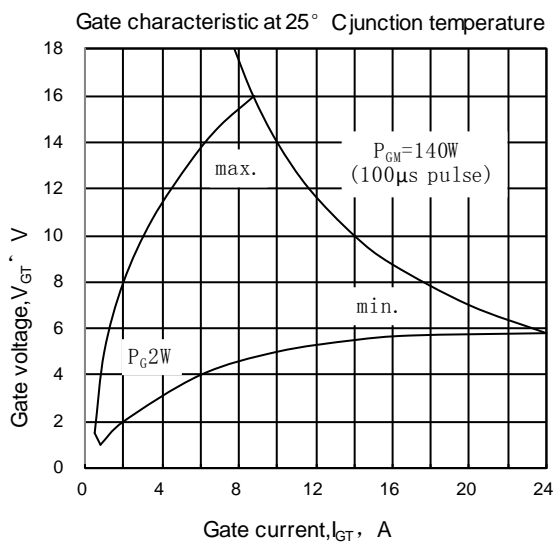


Fig5

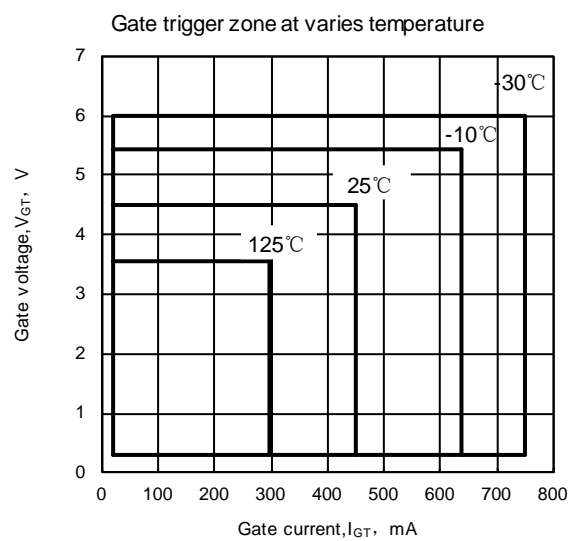


Fig6

Outline:

