

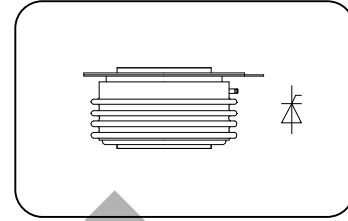
Features:

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

Typical Applications

- n Inductive heating
- n Electronic welders
- n Self-commutated inverters

$I_{T(AV)}$ **1765A**
 V_{DRM}/V_{RRM} **1900~2500V**
 t_q **50~80μs**
 I_{TSM} **22.7KA**
 I^2t **2576 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 _{hs} =55°C	125			1765	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	V_{DRM} & V_{RRM} , tp=10ms V_{DSM} & V_{RSM} = V_{DRM} & V_{RRM} +100V	125	1900		2500	V
I_{DRM} I_{RRM}	Repetitive peak current	V_D = V_{DRM} V_R = V_{RRM}	125			160	mA
I_{TSM}	Surge on-state current	10ms half sine wave	125			22.7	KA
I^2t	I ² T for fusing coordination	V_R =0.6 V_{RRM}				2576	A ² s*10 ³
V_{TO}	Threshold voltage		125			1.48	V
r_T	On-state slop resistance					0.23	mW
V_{TM}	Peak on-state voltage	I_{TM} =4000A, F=35KN	125			2.40	V
dv/dt	Critical rate of rise of off-state voltage	V_{DM} =0.67 V_{DRM}	125			500	V/μs
di/dt	Critical rate of rise of on-state current	V_{DM} = 67% V_{DRM} to3000A Gate pulse t _r ≤0.5 μ s I _{GM} =1.5A	125			1000	A/μs
I_{rm}	Reverse recovery current					166	A
t_{rr}	Reverse recovery time	I_{TM} =1700A, tp=1000μs, di/dt=-20A/μs, V_R =50V	125			10	μs
Q_{rr}	Recovery charge					836	μC
t_q	Circuit commutated turn-off time	I_{TM} =1700A, tp=1000μs, V_R =50V dv/dt=30V/μs , di/dt=-20A/μs	125	50		80	μs
I_{GT}	Gate trigger current			40		450	mA
V_{GT}	Gate trigger voltage	V_A =12V, I_A =1A	25	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
$R_{th(j-h)}$	Thermal resistance Junction to heat sink	At 180° sine double side cooled Clamping force 35KN				0.016	°C/W
F_m	Mounting force			30		40	KN
T_{stg}	Stored temperature			-40		140	°C
W_t	Weight					900	g
Outline	KT60cT70						

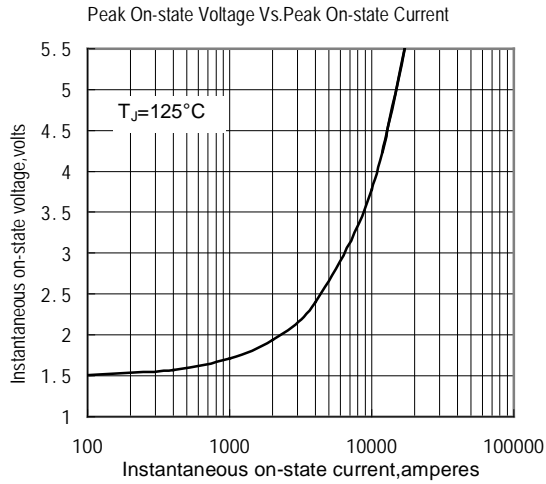


Fig.1

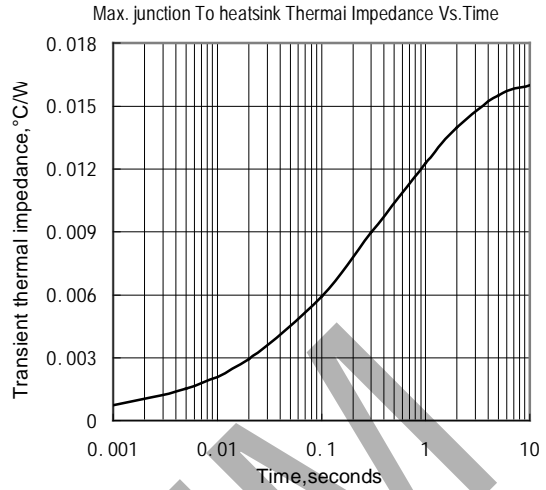


Fig.2

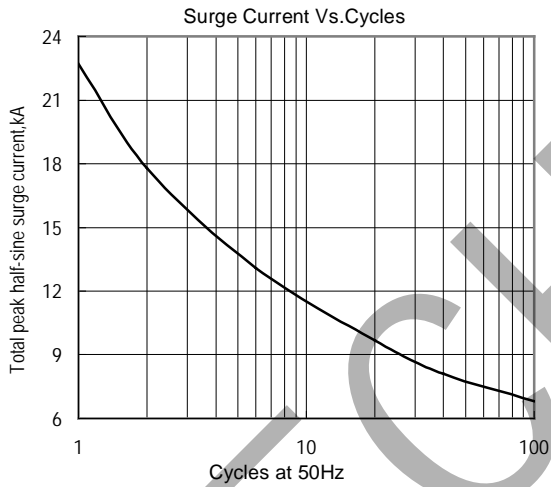


Fig.3

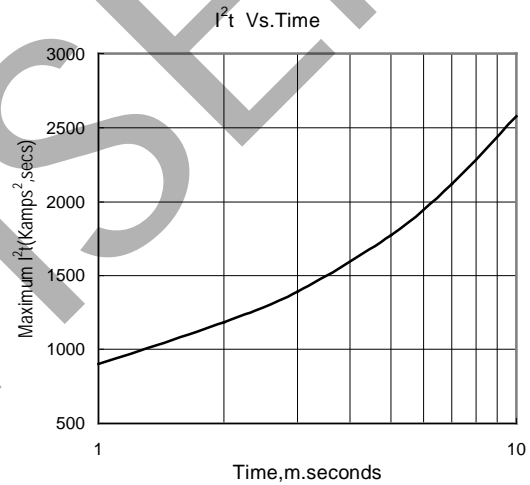


Fig.4

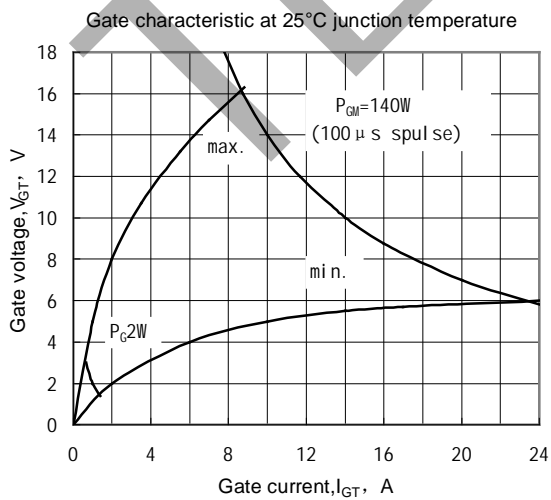


Fig.5

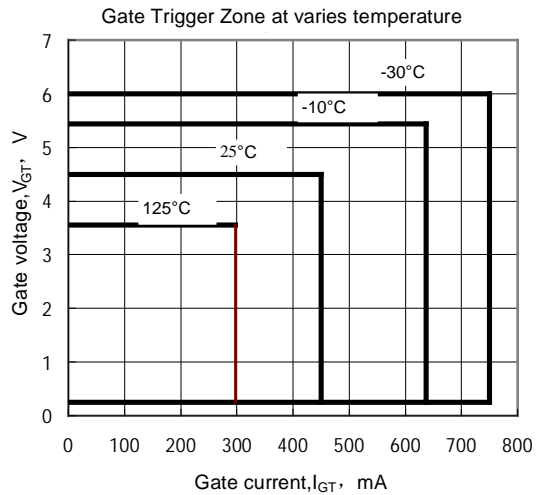
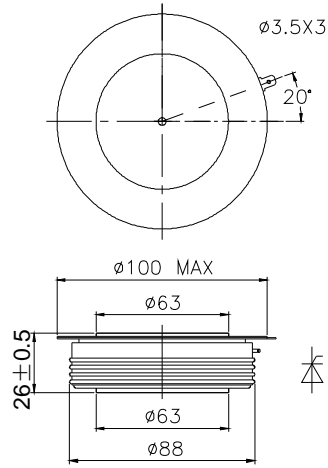


Fig.6

Outline:



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