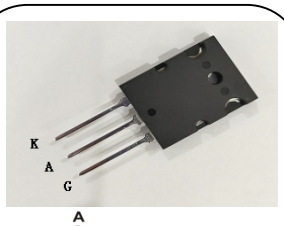


Backside:anode

Features：

- **n** Planar passivated chip
- **n** Long-term stability

Typical Applications：

- **n** Softstart AC motor control
- **n** DC Motor control
- **n** Power converter
- **n** AC power control

SYMBOL	CHARACTERISTIC	TEST CONDITIONS		T_j(°C)	VALUE			UNIT
					Min	Type	Max	
$I_{T(AV)}$	Mean on-state current	180° half sine wave 50Hz	T_C=100°C	125			50	A
$I_{T(RMS)}$	RMS on-state current			125			75	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	tp=10ms		25			1200	V
I_{DRM} I_{RRM}	Repetitive peak off-state current Repetitive peak reverse current	at V_{DRM},V_{RRM}		25			50	μA
				125			10	mA
I_{TSM}	Surge on-state current	10ms half sine wave		25			600	A
I^2t	I^2t value for fusing						1800	A^2s
V_{TM}	Peak on-state voltage	I_{TM}=100A		25			1.60	V
di/dt	Critical rate of rise of on-state current	I_G=2*I_{GT}		25			150	A/μs
dv/dt	Critical rate of rise of off-state voltage	V_D=2/3V_{DRM} Gate Open		125			1000	V/μs
I_L	Latching current	I_G=1.2 I_{GT}		25			150	mA
I_{GT}	Gate trigger current	V_D=12V R_L=33Ω		25	30		70	mA
V_{GT}	Gate trigger voltage						1.5	V
I_H	Holding current	I_T=1.0A		25			120	mA
V_{GD}	Non-trigger gate voltage	V_D=V_{DRM} R_L=3.3kΩ		125			0.25	V
I_{GM}	Peak gate current						4	A
$P_{G(AV)}$	Average gate power dissipation						1	W
P_{GM}	Peak gate power						5	W
$R_{th(j-c)}$	Thermal resistance Junction to case					0.5		°C /W
T_{stg}	Storage junction temperature range				-40		150	°C
T_j	Operating junction temperature				-40		125	°C
Outline	TO-247							

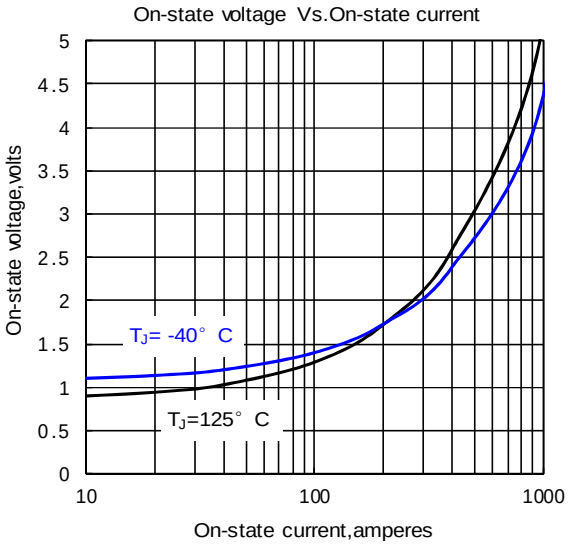


Fig.1

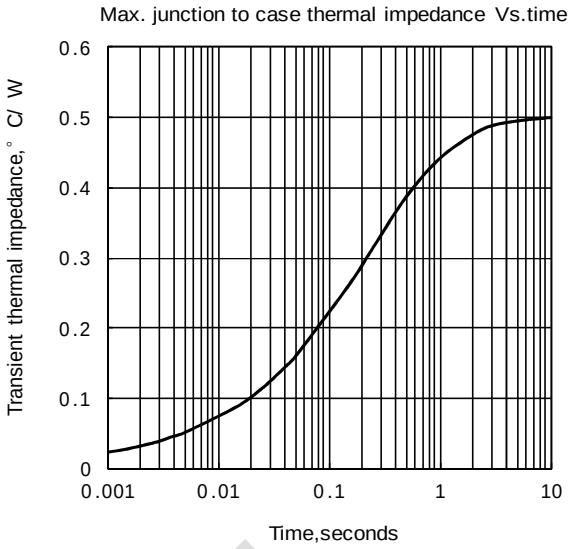


Fig.2

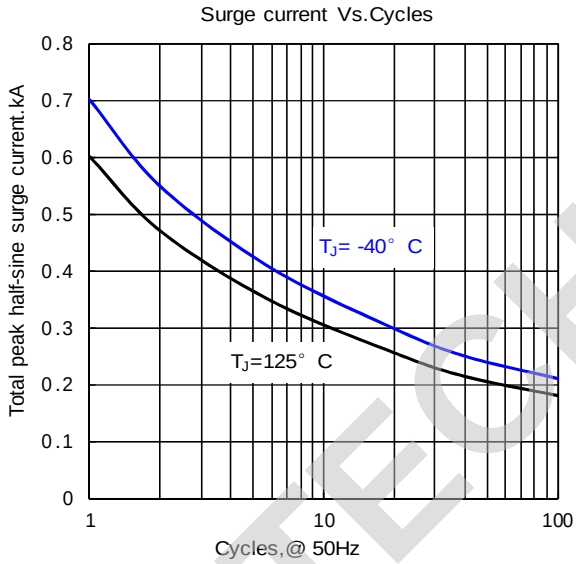


Fig.3

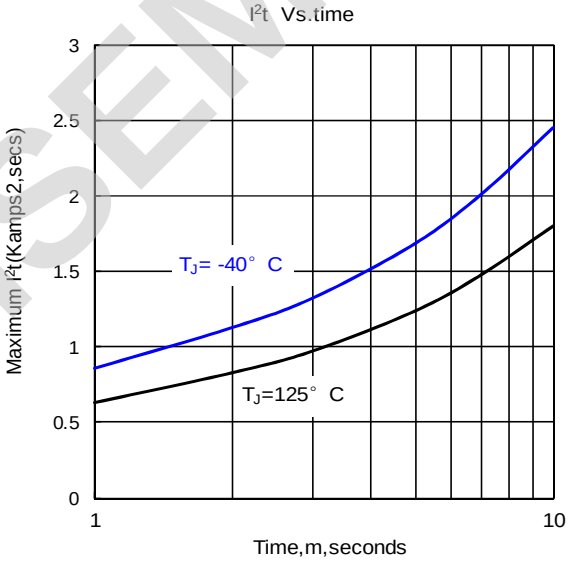


Fig.4

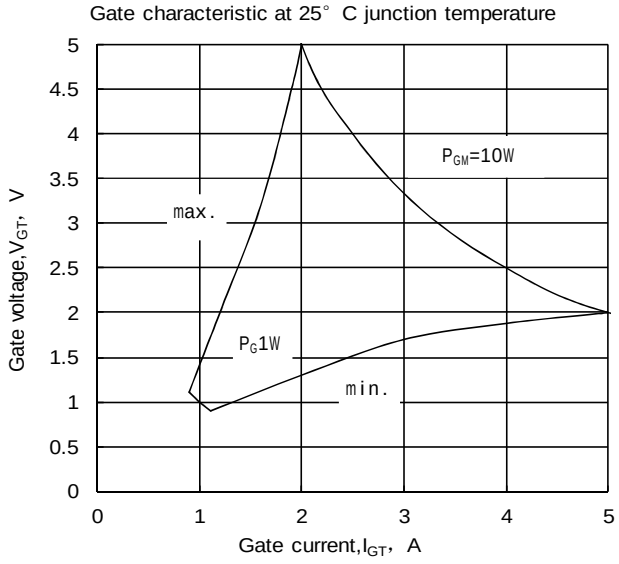


Fig.5

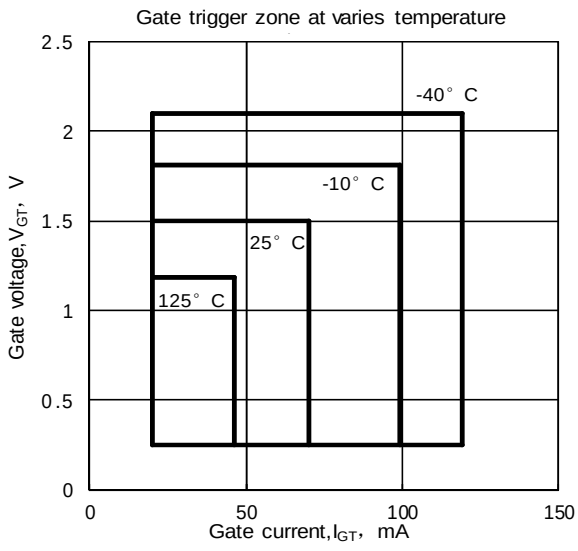
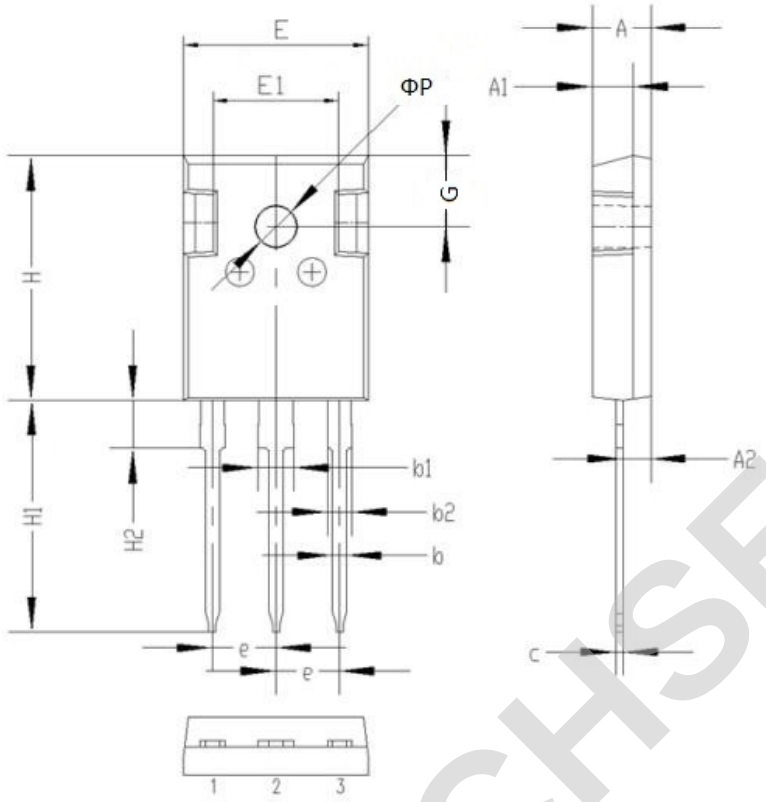


Fig.6

Outline:

TO-247 PACKAGE



Symbol	Dimensions(mm)	
	Min.	Max.
A	4.80	5.20
A1	3.30	3.70
A2	2.10	2.50
b	1.00	1.40
b1	2.90	3.30
b2	1.90	2.30
c	0.40	0.80
e	5.25	5.65
E	15.6	16.0
E1	10.6	11.0
H	20.8	21.2
H1	19.4	20.4
H2	3.90	4.30
G	5.90	6.30
ΦP	3.30	3.70