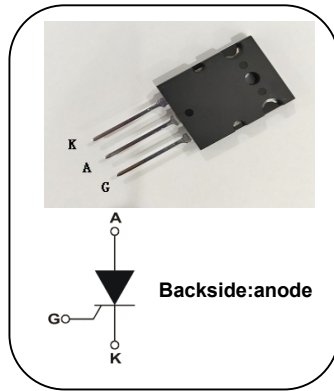


**Features:**

Planar passivated chip
Long-term stability

Typical Applications:

Softstart AC motor control
DC Motor control
Power converter
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	t _p =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 ² t	I ² t value for fusing						1800	A ² s
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 =33 Ω		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 =3.3k Ω		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							

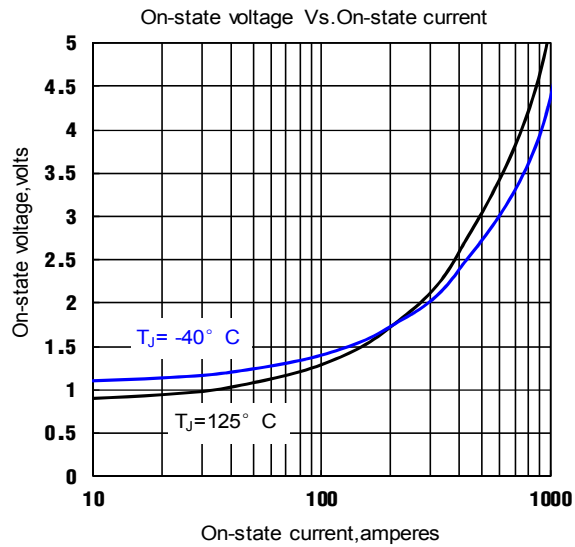


Fig.1

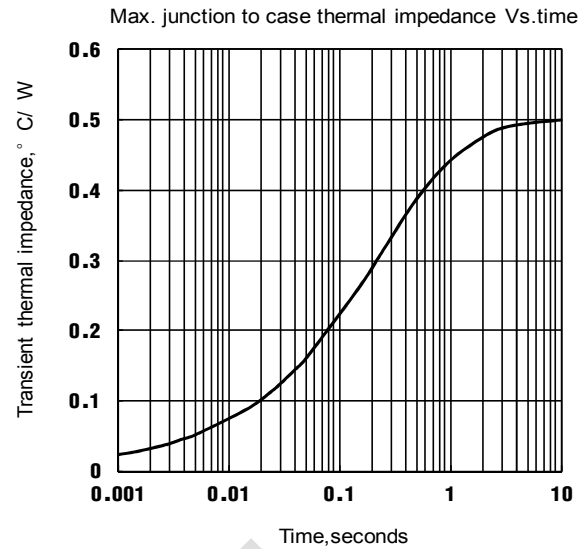


Fig.2

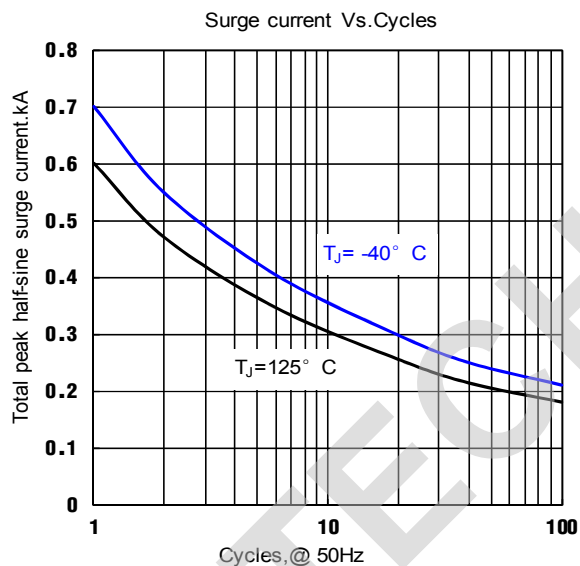


Fig.3

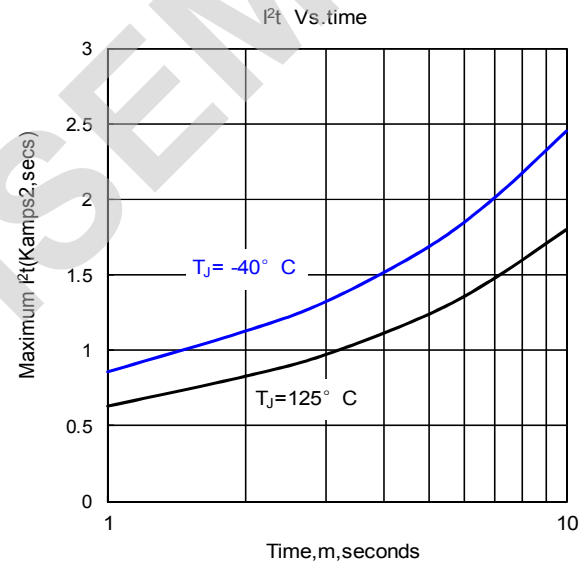


Fig.4

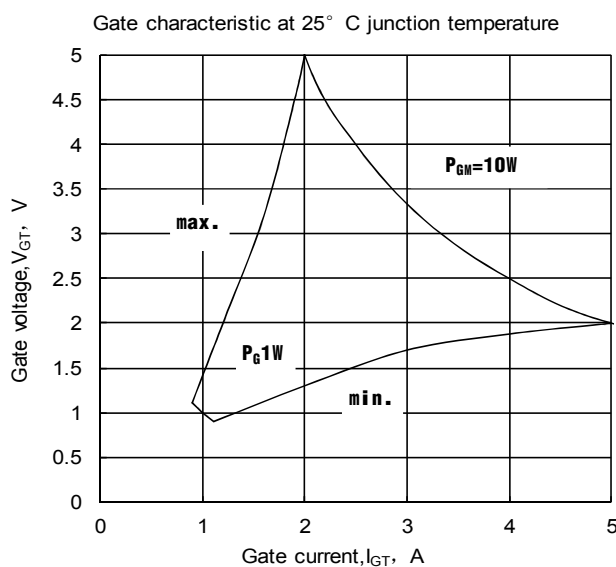


Fig.5

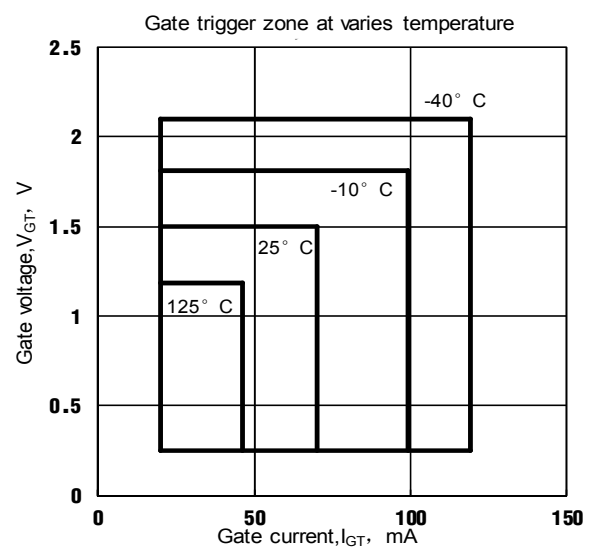
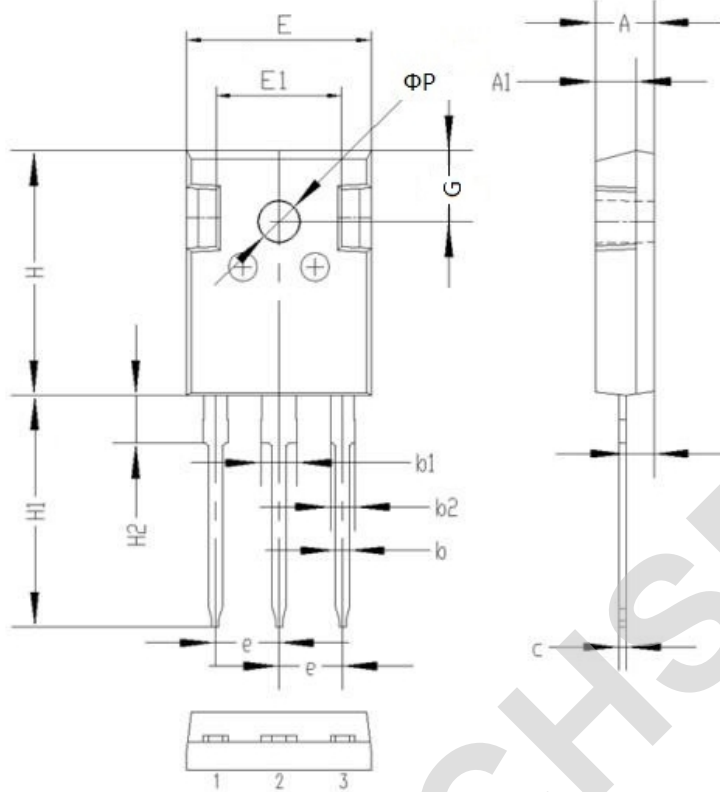


Fig.6

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