

Features:

- n Planar passivated chip
- n Long-term stability

Typical Applications:

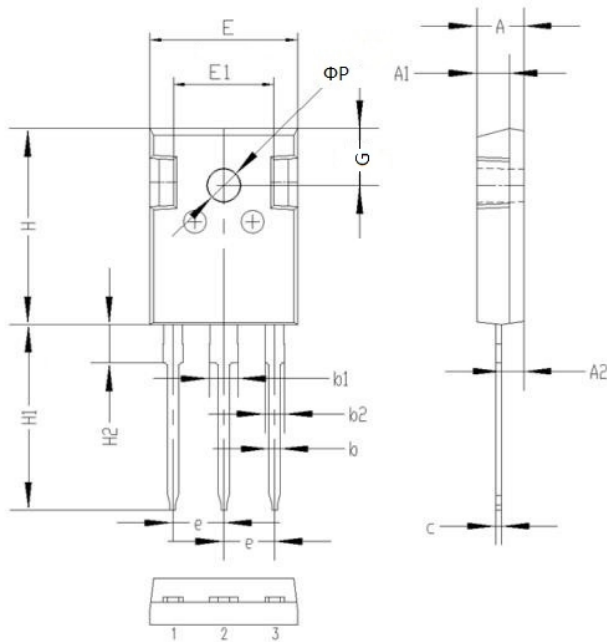
- n Softstart AC motor control
- n DC Motor control
- n Power converter
- n AC power control

I_{T(RMS)} **60A**
V_{DRM}/V_{RRM} **1600V**
I_{GT} **20mA~100mA**

SYMBOL	CHARACTERISTIC	TEST CONDITIONS		T _j (°C)	VALUE			UNIT
					Min	Type	Max	
I _{T(RMS)}	RMS on-state current	180° half sine wave 50Hz	T _C =70°C	125			60	A
V _{DRM} V _{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	tp=10ms		25			1600	V
I _{DRM} I _{RRM}	Repetitive peak off-state current Repetitive peak reverse current	at V _{DRM} /V _{RRM}		25			100	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} =60A, tp=380µs		25			1.60	V
di/dt	Critical rate of rise of on-state current	I _G =2*I _{GT}		25			100	A/µs
dv/dt	Critical rate of rise of off-state voltage	V _D =2/3V _{DRM} , Gate Open		125			700	V/µs
I _{GT}	Gate trigger current	V _D =12V R _L =33 Ω		25	20		100	mA
V _{GT}	Gate trigger voltage						1.5	V
I _H	Holding current	I _T =500mA		25	10		150	mA
I _L	Latching current	I _G =1.2 I _{GT}		25			250	mA
V _{GD}	Non-trigger gate voltage	V _D =V _{DRM} R _L =3.3k Ω		125			0.2	V
I _{GM}	Peak gate current						5	A
P _{G(AV)}	Average gate power dissipation						1	W
P _{GM}	Peak gate power						10	W
R _{th(j-c)}	Thermal resistance Junction to case					0.8		°C/W
T _{stg}	Storage junction temperature range				-40		150	°C
T _j	Operating junction temperature				-40		125	°C
Outline	TO-247							

Outline:

TO-247 PACKAGE



Symbol	Dimensions(millimeters)	
	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	11.00
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