**Features:**

Planar passivated chip
Long-term stability

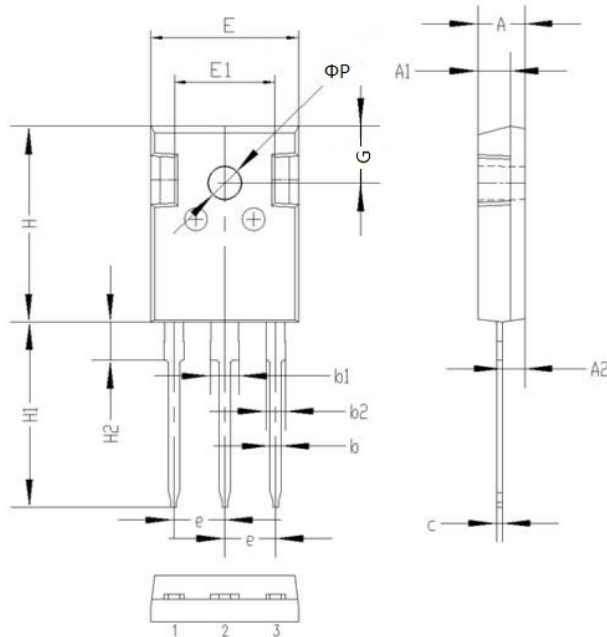
Typical Applications:

Softstart AC motor control
DC Motor control
Power converter
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	$T_C=70^\circ\text{C}$	125			60	A
V_{DRM} V_{RRM}	Repetitive peak off-state voltage Repetitive peak reverse voltage	$t_p=10\text{ms}$		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^2t	I^2t value for fusing						1800	A^2s
V_{TM}	Peak on-state voltage	$I_{TM}=60\text{A}$, $t_p=380\mu\text{s}$		25			1.60	V
di/dt	Critical rate of rise of on-state current	$I_G=2 \cdot I_{GT}$		25			100	$\text{A}/\mu\text{s}$
dv/dt	Critical rate of rise of off-state voltage	$V_D=2/3 V_{DRM}$, Gate Open		125			700	$\text{V}/\mu\text{s}$
I_{GT}	Gate trigger current	$V_D=12\text{V}$ $R_L=33\Omega$		25	20		100	mA
V_{GT}	Gate trigger voltage						1.5	V
I_H	Holding current	$I_T=500\text{mA}$		25	10		150	mA
I_L	Latching current	$I_G=1.2 I_{GT}$		25			250	mA
V_{GD}	Non-trigger gate voltage	$V_D=V_{DRM}$ $R_L=3.3\text{k}\Omega$		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		$^\circ\text{C}/\text{W}$
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