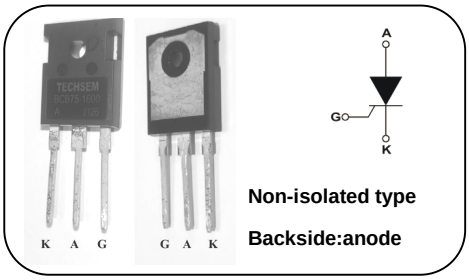


Non-isolated type

Backside:anode

Features：

- **n** Planar passivated chip
- **n** Long-term stability
- **n** Non-isolated type

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	
$I_{T(RMS)}$	RMS on-state current	180° half sine wave 50Hz T_C=115°C	150			75	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			50	μA
			150			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			1.70	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	150			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	150			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				0.3		°C/W
T_{stg}	Storage junction temperature range			-40		150	°C
T_{Vj}	Virtual junction temperature			-40		150	°C
T_{OP}	Operation temperature			-40		150	°C
Outline	TO-247H						

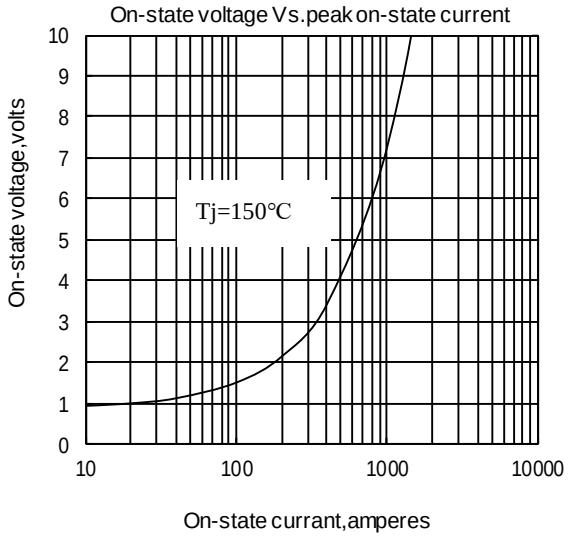


Fig1

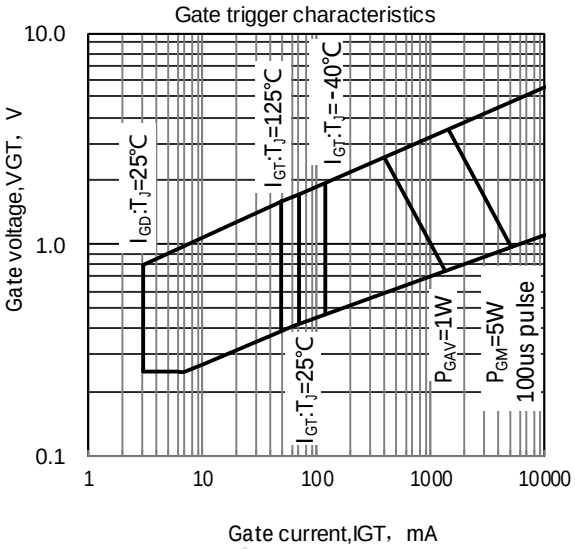


Fig2

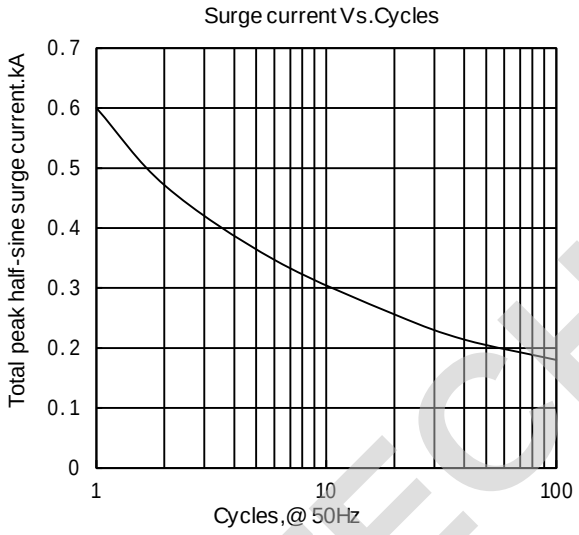


Fig3

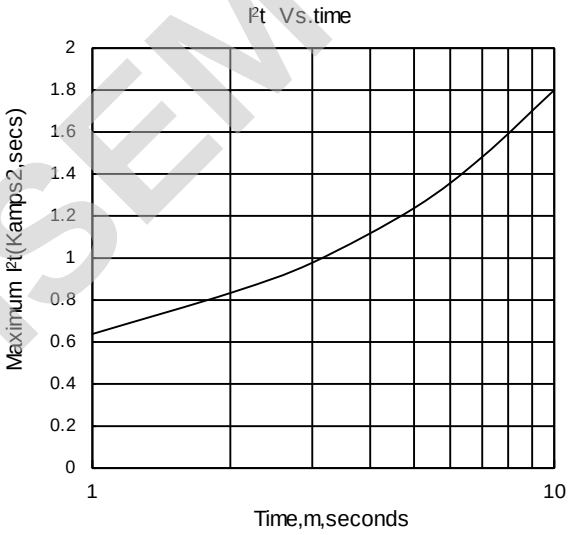


Fig4

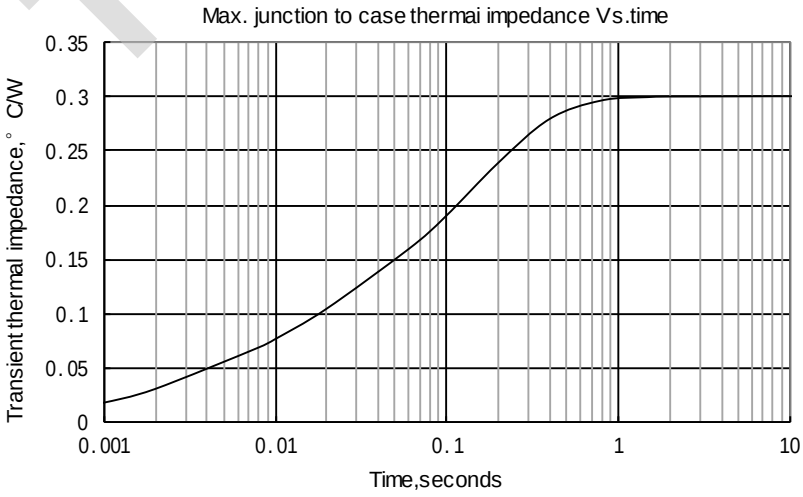
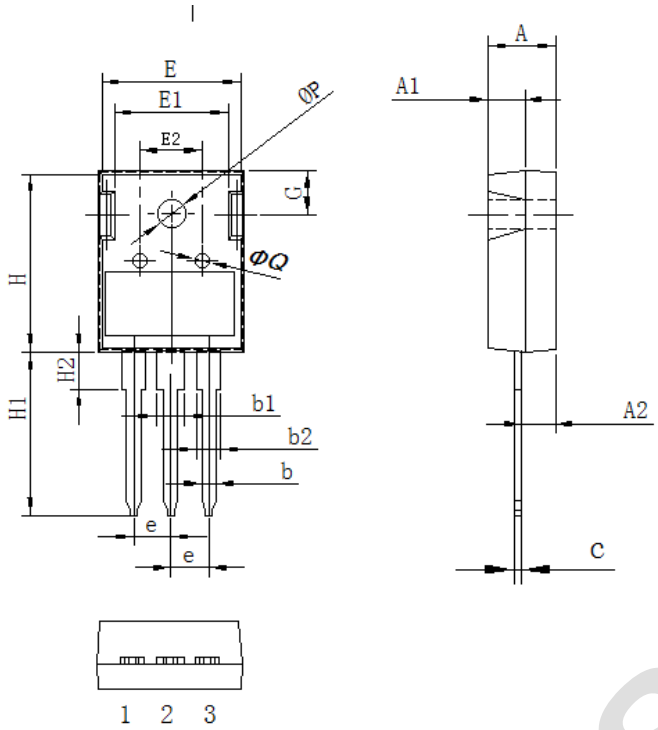


Fig5

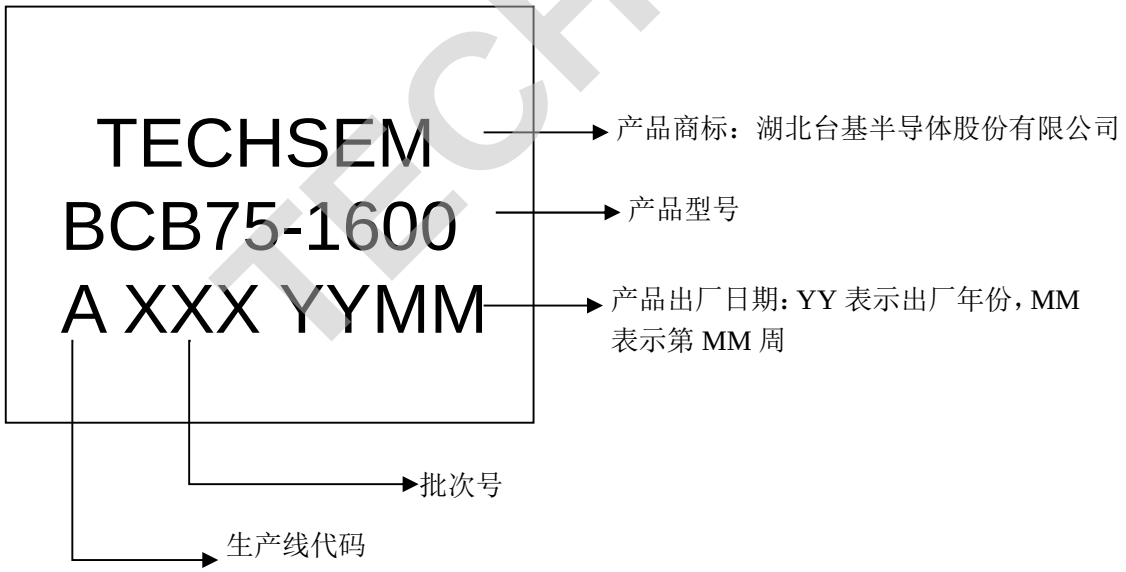
Outline:

TO-247H PACKAGE



Symbol	单位 mm		
	Min	Nom	Max
A	4.80	5.00	5.20
A1	2.80	3.00	3.20
A2	2.20	2.40	2.60
b	1.05	1.20	1.35
b1	2.80	3.00	3.20
b2	1.80	2.00	2.20
c	0.50	0.60	0.70
e	5.35	5.45	5.75
E	15.6	15.8	16.0
E1	12.3	12.5	12.7
E2	6.00	6.20	6.40
H	20.8	21.0	21.2
H1	19.5	20.0	20.5
H2	3.70	4.00	4.30
G	5.70	5.90	6.10
ΦP	3.30	3.50	3.70
ΦQ	2.30	2.50	2.70

Code Designation:



Product Nomenclature:

Type	$I_{T(RMS)}$	V_{DRM},V_{RRM}	I_{TSM}	T_{jmax}	Marking	Outline
BCB75-1600	**75A(T_C=115℃)**	**1600V**	**600A**	**150℃**	**BCB75-1600**	**TO-247H**