Silicon NPN Power Transistors BU406 BU407

DESCRIPTION

- With TO-220C package
- High voltage;high speed
- Low collector saturation voltage

APPLICATIONS

- For use in horizontal deflection output stages of TV's and CTV's circuits

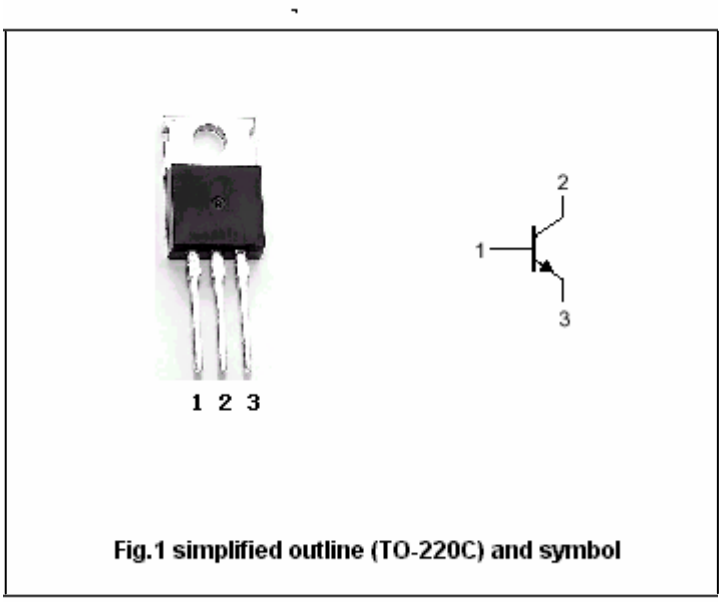

Fig.1 simplified outline (TO-220C) and symbol

PINNING

PIN	DESCRIPTION
1	Base
2	Collector;connected to mounting base
3	Emitter

Absolut maximum ratings (Ta=25℃)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	BU406	Open emitter	400	V
		BU407		330	
V_{CEO}	Collector-emitter voltage	BU406	Open base	200	V
		BU407		150	
V_{EBO}	Emitter-base voltage		Open collector	6	V
I_C	Collector current			7	A
I_{CM}	Collector current-Peak			10	A
I_B	Base current			4	A
P_{tot}	Total power dissipation		T_C=25℃	60	W
T_j	Junction temperature			150	℃
T_{stg}	Storage temperature			-65~150	℃

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
$R_{th\ j\text{-}c}$	Thermal resistance junction to case	2.08	℃/W

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CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	BU406	I_C=100mA ; I_B=0	200			V
		BU407		150			
V_{CEsat}	Collector-emitter saturation voltage		I_C=5A ;I_B=0.5A			1.0	V
V_{BEsat}	Base-emitter saturation voltage		I_C=5A ;I_B=0.5A			1.2	V
I_{CES}	Collector cut-off current	BU406	V_{CE}=400V; V_{BE}=0			5	mA
		BU407	V_{CE}=330V; V_{BE}=0				
I_{EBO}	Emitter cut-off current		V_{EB}=6.0V; I_C=0			1.0	mA
h_{FE}	DC current gain		I_C=2A ; V_{CE}=5V	40		120	
f_T	Transition frequency		I_C=0.5A ;V_{CE}=10V;f=1.0MHz	10			MHz
C_{OB}	Output capacitance		I_E=0 ;V_{CB}=10V;f=1.0MHz		80		pF
t_f	Fall time		I_C=5A ;V_{CC}=40V I_{B1} =-I_{B2}=0.6A;L=150 μ H			0.75	μ s

PACKAGE OUTLINE

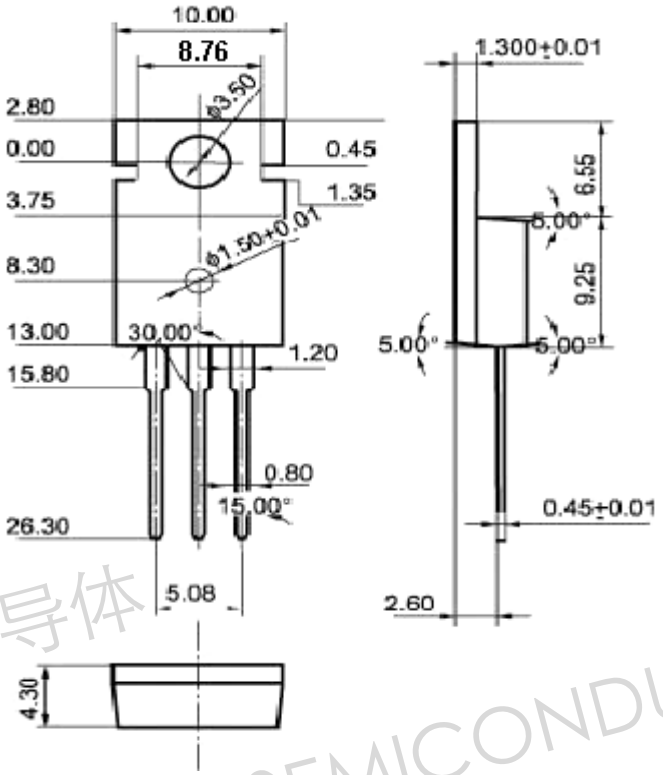

Fig.2 Outline dimensions (unindicated tolerance: ±0.10mm)

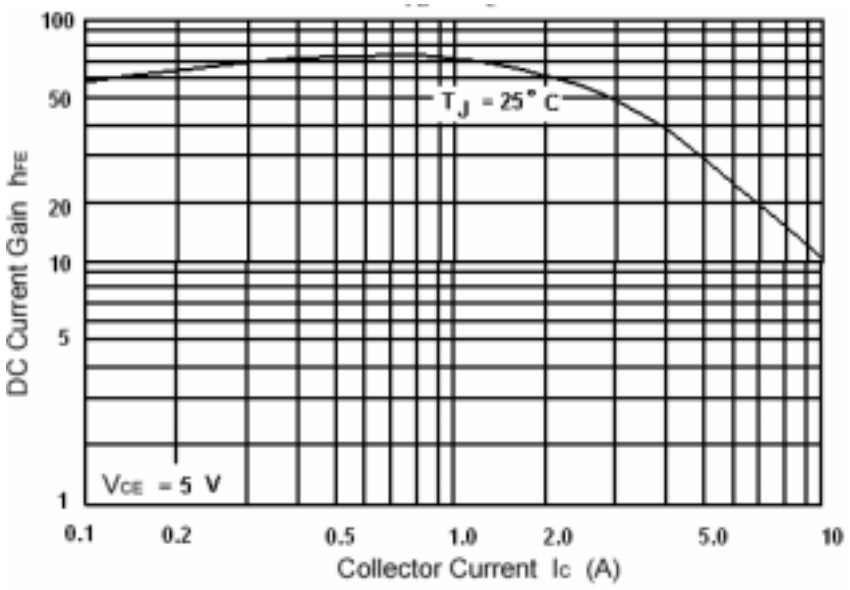

Fig.3 DC current Gain

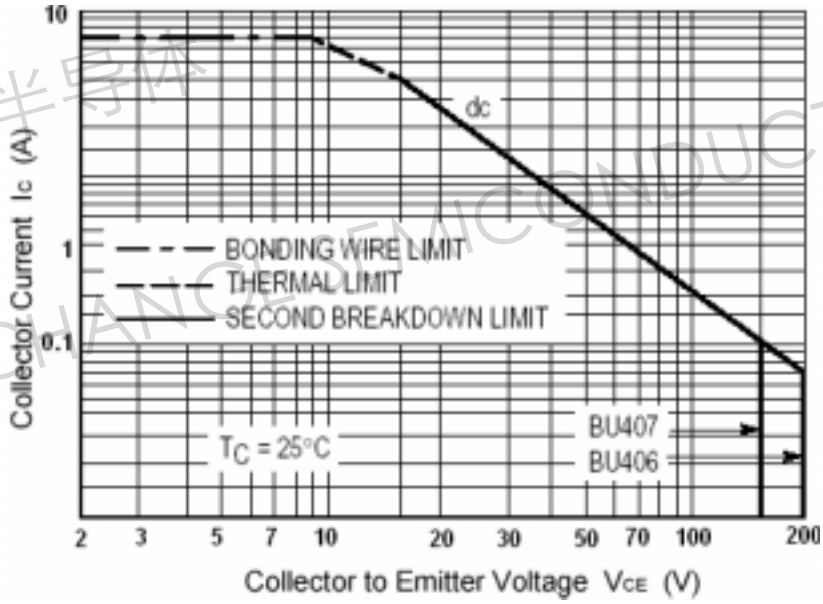

Fig.4 Safe Operating Area