

Silicon NPN Power Transistors

BU406D BU407D

DESCRIPTION

- With TO-220C package
- High voltage
- Fast switching speed
- Low saturation voltage
- Built-in damper diode

APPLICATIONS

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

PINNING

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

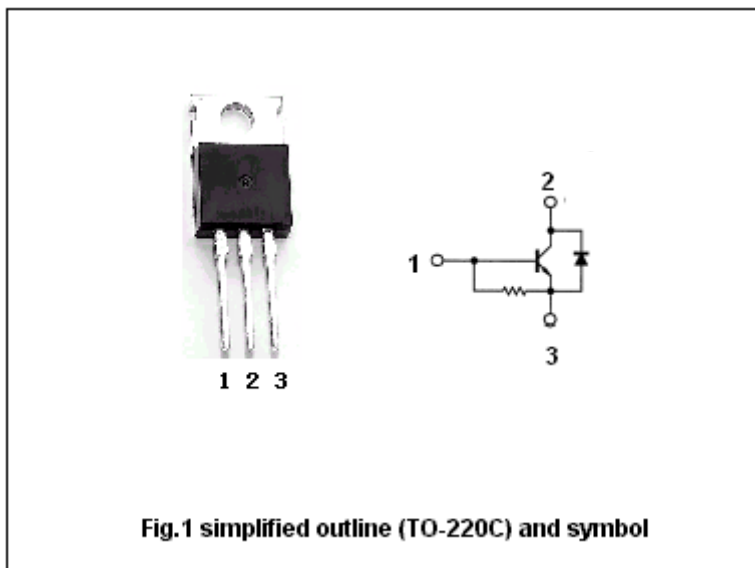


Fig.1 simplified outline (TO-220C) and symbol

Absolut maximum ratings (Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V _{CBO}	Collector-base voltage	BU406D	400	V
		BU407D	330	
V _{CEO}	Collector-emitter voltage	BU406D	200	V
		BU407D	150	
V _{EBO}	Emitter-base voltage	Open collector	6	V
I _C	Collector current (DC)		7	A
I _{CM}	Collector current-Peak		10	A
I _B	Base current		4	A
P _{tot}	Total power dissipation	T _C =25°C	60	W
T _j	Maximum operating junction temperature		150	°C
T _{stg}	Storage temperature		-65~150	°C

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	MAX	UNIT
R _{th j-c}	Thermal resistance junction to case	2.08	°C/W

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CHARACTERISTICS

T_j=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
V _{CEO(SUS)}	Collector-emitter sustaining voltage	BU406D	I _C =100mA ; I _B =0	200		V
		BU407D		150		
V _{CEsat}	Collector-emitter saturation voltage	I _C =5A ; I _B =0.65A			1.0	V
V _{BEsat}	Base-emitter saturation voltage	I _C =5A ; I _B =0.65A			1.3	V
I _{CEV}	Collector cut-off current	BU406D	V _{CE} =400V; V _{BE} =-1.5V		15	mA
		BU407D		V _{CE} =330V; V _{BE} =-1.5V		
I _{EBO}	Emitter cut-off current	V _{EB} =6.0V; I _C =0			400	mA
h _{FE}	DC current gain	I _C =2A ; V _{CE} =5V		15		
V _F	Diode forward voltage	I _F =5A			1.5	V
f _T	Transition frequency	I _C =0.5A ; V _{CE} =10V; f=1.0MHz	10			MHz
t _f	Fall time	I _C =5A ; V _{CC} =40V I _{Bend} =0.65A			0.75	μs

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PACKAGE OUTLINE

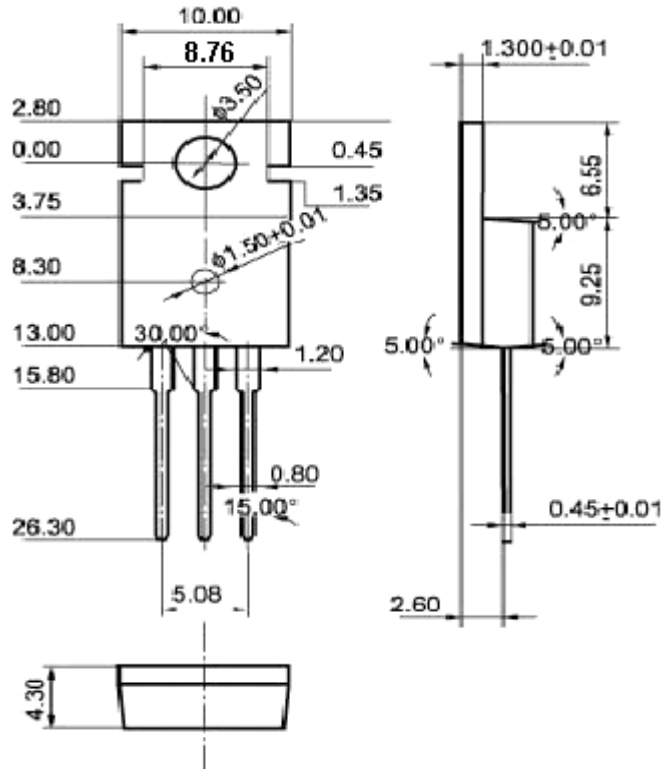


Fig.2 Outline dimensions (unindicated tolerance: $\pm 0.10\text{mm}$)