Silicon NPN Power Transistors BU1706AX

DESCRIPTION

·With TO-220F package
·High voltage
·High speed switching

APPLICATIONS

·For use in high frequency electronic lighting ballast applications.

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

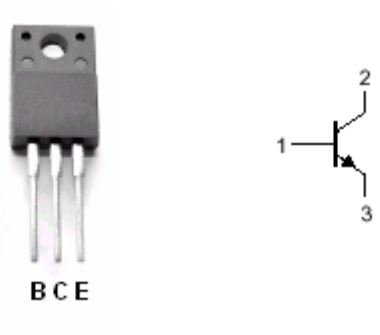


Fig.1 simplified outline (TO-220F) and symbol

Absolute maximum ratings (Ta=25□)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	1750	V
V_{CEO}	Collector-emitter voltage	Open base	850	V
V_{EBO}	Emitter-base voltage	Open collector	7.5	V
I_C	Collector current		5	A
I_{CM}	Collector current (peak)		8	A
I_B	Base current		3	A
I_{BM}	Base current (peak)		5	A
P_T	Total power dissipation	T_C=25□	32	W
T_j	Junction temperature		150	□
T_{stg}	Storage temperature		-40~150	□

CHARACTERISTICS

Tj=25□ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	I_C=100mA ;I_B=0;L=25mH	750			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=1.5A; I_B=0.3A			1.0	V
V_{BEsat}	Base-emitter saturation voltage	I_C=1.5A; I_B=0.3A			1.3	V
I_{CES}	Collector cut-off current	V_{CE}=rated;V_{BE}=0 T_j=125□			1.0 2.0	mA
I_{EBO}	Emitter cut-off current	V_{EB}=12V; I_C=0			1.0	mA
h_{FE-1}	DC current gain	I_C=5mA ; V_{CE}=10V	8			
h_{FE-2}	DC current gain	I_C=0.4A ; V_{CE}=3V	12	18	35	
h_{FE-3}	DC current gain	I_C=1.5A ; V_{CE}=1V	5	7		

Switching times

t_{on}	Turn-on time	I_C=1.5A ;I_{B1}=-I_{B2}=0.3A		1.1	1.5	μs
t_s	Storage time			5.0	6.5	μs
t_f	Fall time			0.75	1.0	μs

PACKAGE OUTLINE

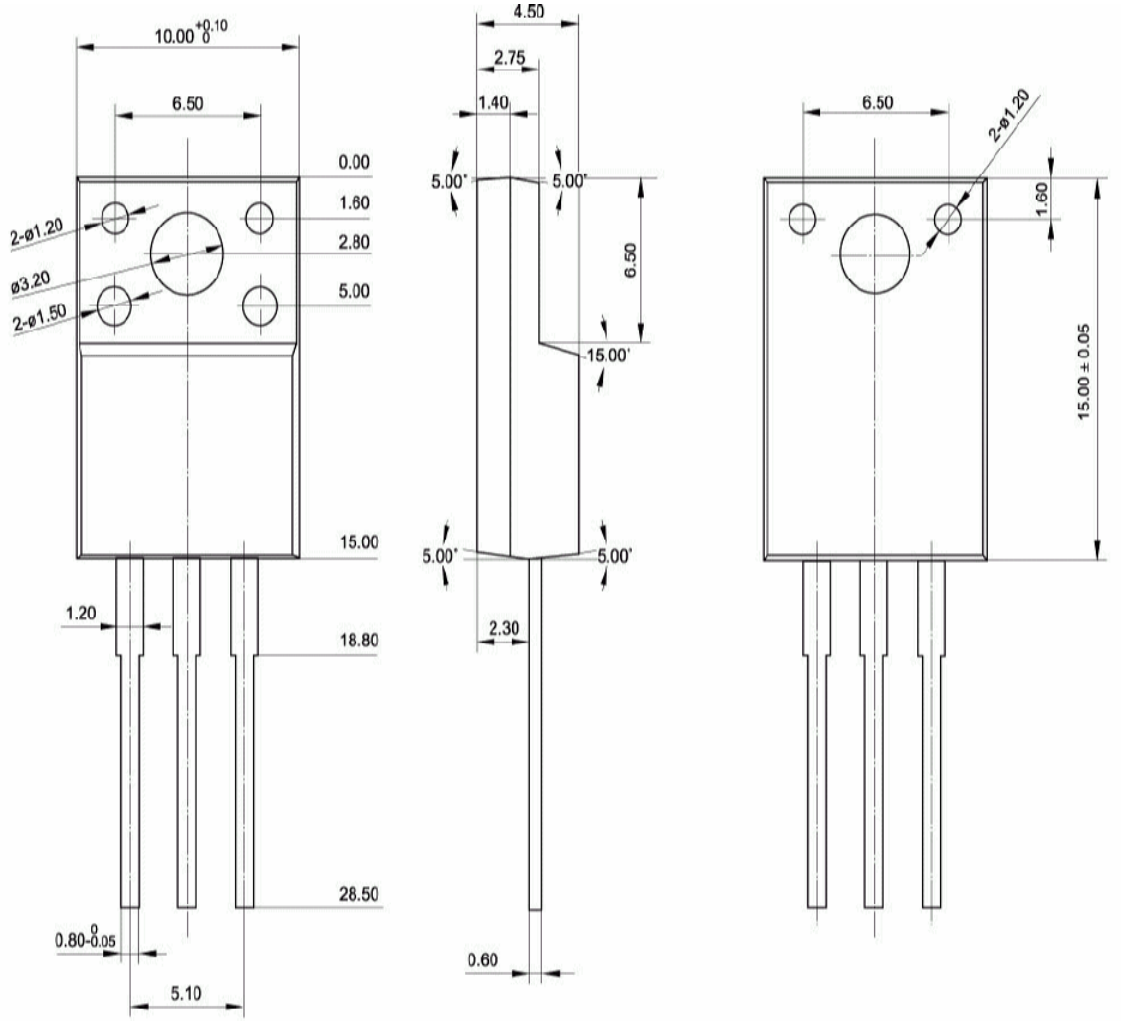


Fig.2 Outline dimensions