Silicon NPN Power Transistors TIP41D/41E/41F

DESCRIPTION

- With TO-220C package
- Complement to type TIP42D/42E/42F

APPLICATIONS

- For medium power linear switching applications

PINNING

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

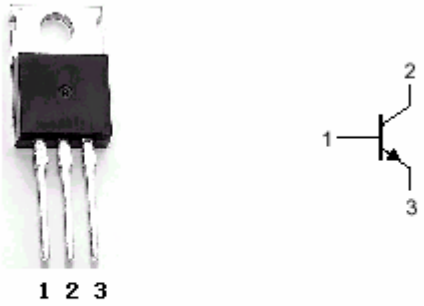

Fig.1 simplified outline (TO-220C) and symbol

Absolute maximum ratings(Tc=25℃)

SYMBOL	PARAMETER		CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	TIP41D	Open emitter	160	V
		TIP41E		180	
		TIP41F		200	
V_{CEO}	Collector-emitter voltage	TIP41D	Open base	120	V
		TIP41E		140	
		TIP41F		160	
V_{EBO}	Emitter-base voltage		Open collector	5	V
I_C	Collector current (DC)			6	A
I_{CM}	Collector current-Pulse			10	A
I_B	Base current			3	A
P_C	Collector power dissipation		T_C=25℃	65	W
			T_a=25℃	2	
T_j	Junction temperature			150	℃
T_{stg}	Storage temperature			-65~150	℃

Silicon NPN Power Transistors TIP41D/41E/41F

CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER		CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{CEO(SUS)}$	Collector-emitter sustaining voltage	TIP41D	I_C=30mA; I_B=0	120			V
		TIP41E		140			
		TIP41F		160			
V_{CEsat}	Collector-emitter saturation voltage		I_C=6A; I_B=1.5A			1.5	V
V_{BE}	Base-emitter on voltage		I_C=6A ; V_{CE}=4V			2.0	V
I_{CES}	Collector cut-off current	TIP41D	V_{CE}=120V; V_{EB}=0			0.4	mA
		TIP41E	V_{CE}=140V; V_{EB}=0				
		TIP41F	V_{CE}=160V; V_{EB}=0				
I_{CEO}	Collector cut-off current		V_{CE}=90V; I_B=0			0.7	mA
I_{EBO}	Emitter cut-off current		V_{EB}=5V; I_C=0			1.0	mA
h_{FE-1}	DC current gain		I_C=0.3A ; V_{CE}=4V	30			
h_{FE-2}	DC current gain		I_C=3A ; V_{CE}=4V	15			
f_T	Transiton frequency		I_C=0.5A ; V_{CE}=10V	3			MHz

PACKAGE OUTLINE

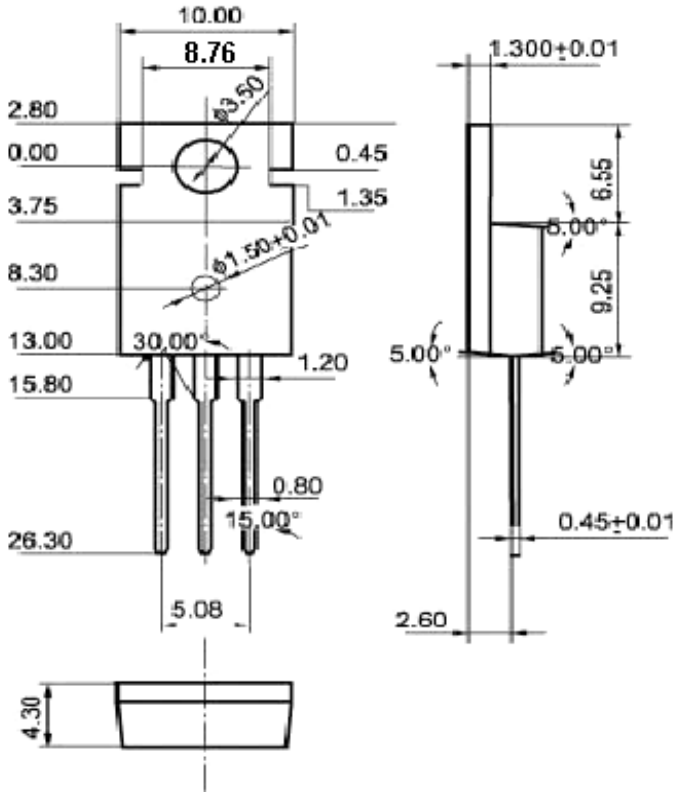

Fig.2 Outline dimensions