

Silicon NPN Power Transistors

TIP41D/41E/41F

DESCRIPTION

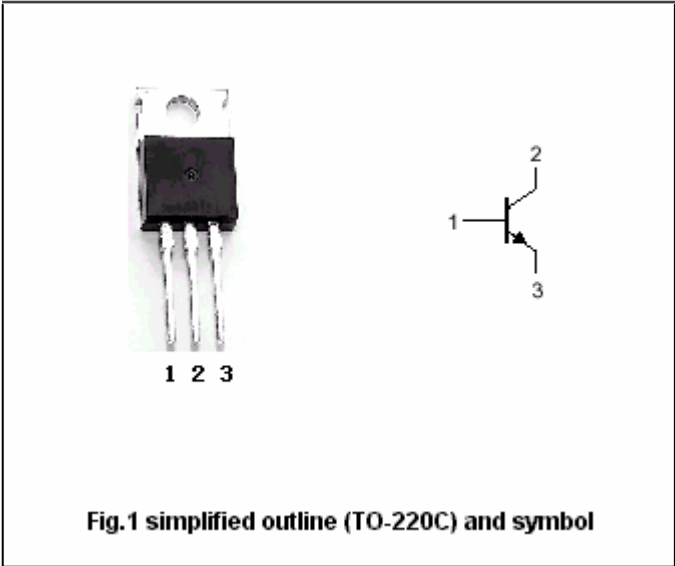
- With TO-220C package
- Complement to type TIP42D/42E/42F

APPLICATIONS

- For medium power linear switching applications

PINNING

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



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	

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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

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PACKAGE OUTLINE

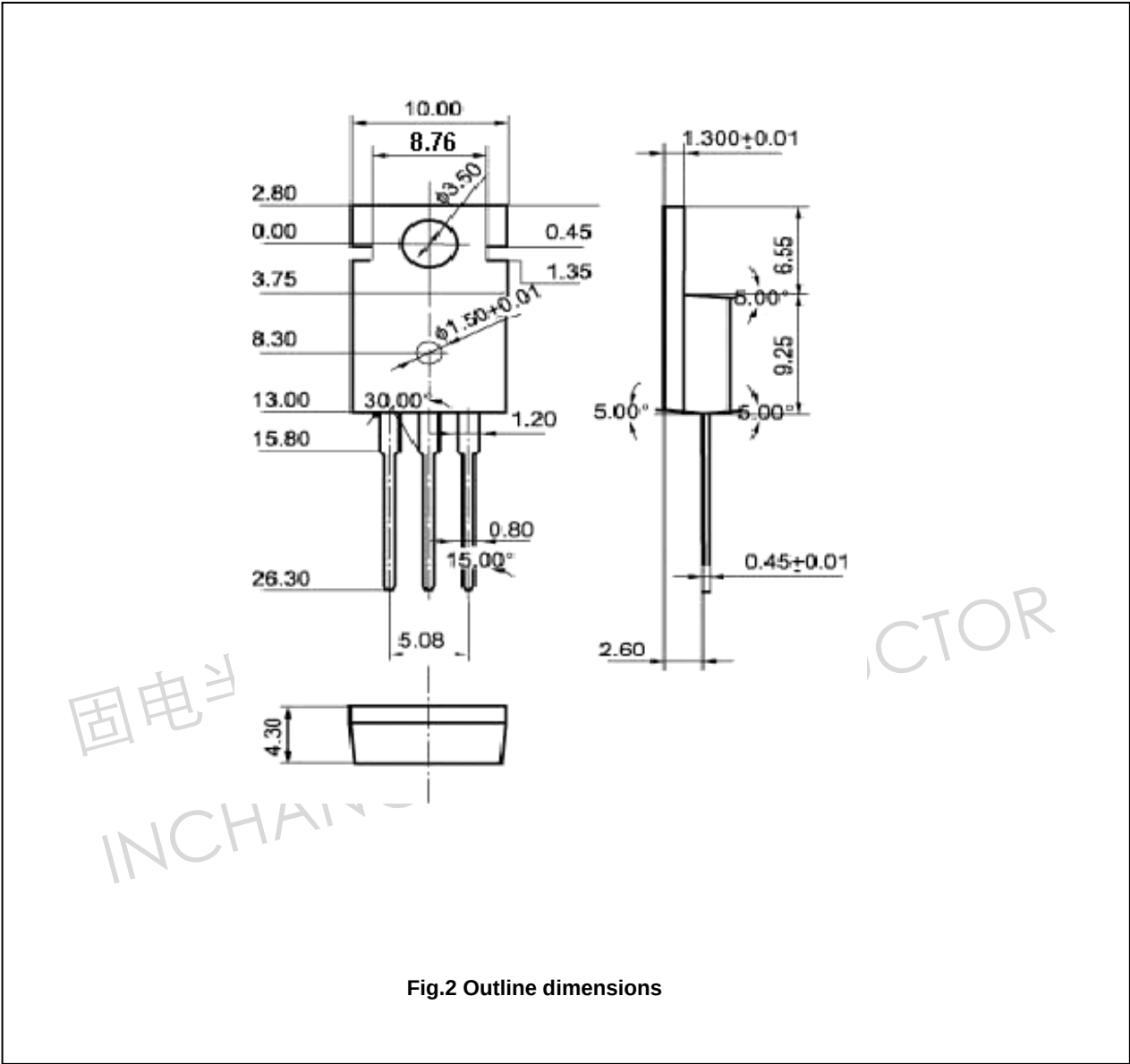


Fig.2 Outline dimensions