Silicon NPN Power Transistors 2SD2257

DESCRIPTION

- With TO-220F package
- High DC current gain
- Low saturation voltage
- Complement to type 2SB1495
- DARLINGTON

APPLICATIONS

- High power switching applications
- Hammer drive,pulse motor drive applications

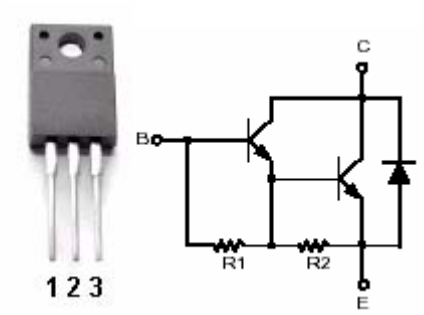

Fig.1 simplified outline (TO-220F) and symbol

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

国电半导体 INCHANGE SEMICONDUTOR

Absolute maximum ratings (Ta=25℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	100	V
V_{CEO}	Collector-emitter voltage	Open base	100	V
V_{EBO}	Emitter-base voltage	Open collector	8	V
I_C	Collector current		±3	A
I_{CM}	Collector current-peak		±5	A
I_B	Base current		0.3	A
P_C	Collector dissipation	T_a=25℃	2.0	W
		T_C=25℃	20	
T_j	Junction temperature		150	℃
T_{stg}	Storage temperature		-55~150	℃

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CHARACTERISTICS

Tj=25℃ unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Collector-emitter breakdown voltage	I_C=10mA ;I_B=0	100			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=1.5A ;I_B=1.5mA			1.5	V
V_{BEsat}	Base-emitter saturation voltage	I_C=1.5A ;I_B=1.5mA			2.0	V
I_{CBO}	Collector cut-off current	V_{CB}=100V ;I_E=0			10	μA
I_{EBO}	Emitter cut-off current	V_{EB}=8V; I_C=0	0.8		4.0	mA
h_{FE-1}	DC current gain	I_C=1A ; V_{CE}=2V	2000			
h_{FE-2}	DC current gain	I_C=2A ; V_{CE}=2V	2000			
V_{ECF}	Diode forward voltage	I_E=1A			2.0	V
Switching times						
t_{on}	Turn-on time	I_{B1}=-I_{B2}=1.5mA V_{CC}=30V ,R_L=20Ω Duty cycle≤1%		0.5		μs
t_s	Storage time			2.0		μs
t_f	Fall time			0.5		μs

固电半导体 INCHANGE SEMICONDUTOR

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PACKAGE OUTLINE

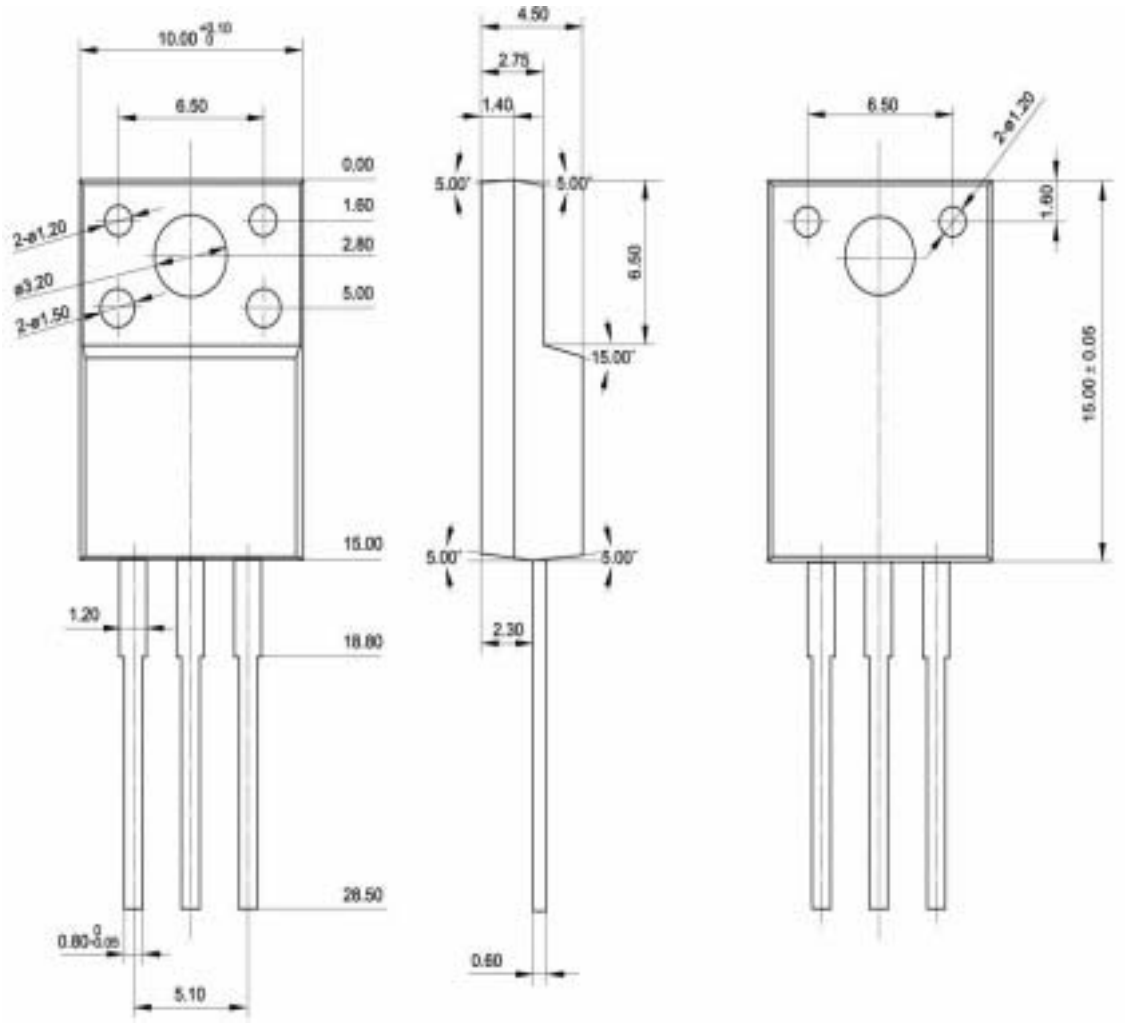

Fig.2 Outline dimensions