Silicon NPN Power Transistors 2SD1761

DESCRIPTION

- With TO-220Fa package
- Low collector saturation voltage
- Complement to type 2SB1187
- Wide safe operating area

APPLICATIONS

- For low frequency power amplifier applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter

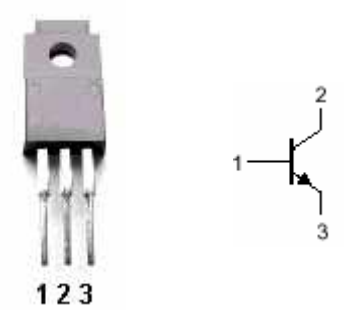

Fig.1 simplified outline (TO-220Fa) and symbol

Absolute maximum ratings(Ta=25℃)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	80	V
V_{CEO}	Collector-emitter voltage	Open base	60	V
V_{EBO}	Emitter-base voltage	Open collector	5	V
I_C	Collector current (DC)		3	A
I_{CM}	Collector current-Peak		6	A
P_C	Collector power dissipation	T_C=25℃	30	W
		T_a=25℃	2	
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=1mA , I_B=0	60			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	I_C=50μA , I_E=0	80			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	I_E=50μA , I_C=0	5			V
V_{CEsat}	Collector-emitter saturation voltage	I_C=2A I_B=0.2A			1.0	V
V_{BEsat}	Base-emitter saturation voltage	I_C=2A I_B=0.2A			1.5	V
I_{CBO}	Collector cut-off current	V_{CB}=60V I_E=0			10	μA
I_{EBO}	Emitter cut-off current	V_{EB}=4V; I_C=0			10	μA
h_{FE}	DC current gain	I_C=0.5A ; V_{CE}=5V	60		320	
f_T	Transition frequency	I_C=0.5A ; V_{CE}=5V		8		MHz
C_{ob}	Output capacitance	I_E=0 ; V_{CB}=10V ,f=1MHz		90		pF

◆ **h_{FE} Classifications**

D	E	F
60-120	100-200	160-320

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PACKAGE OUTLINE

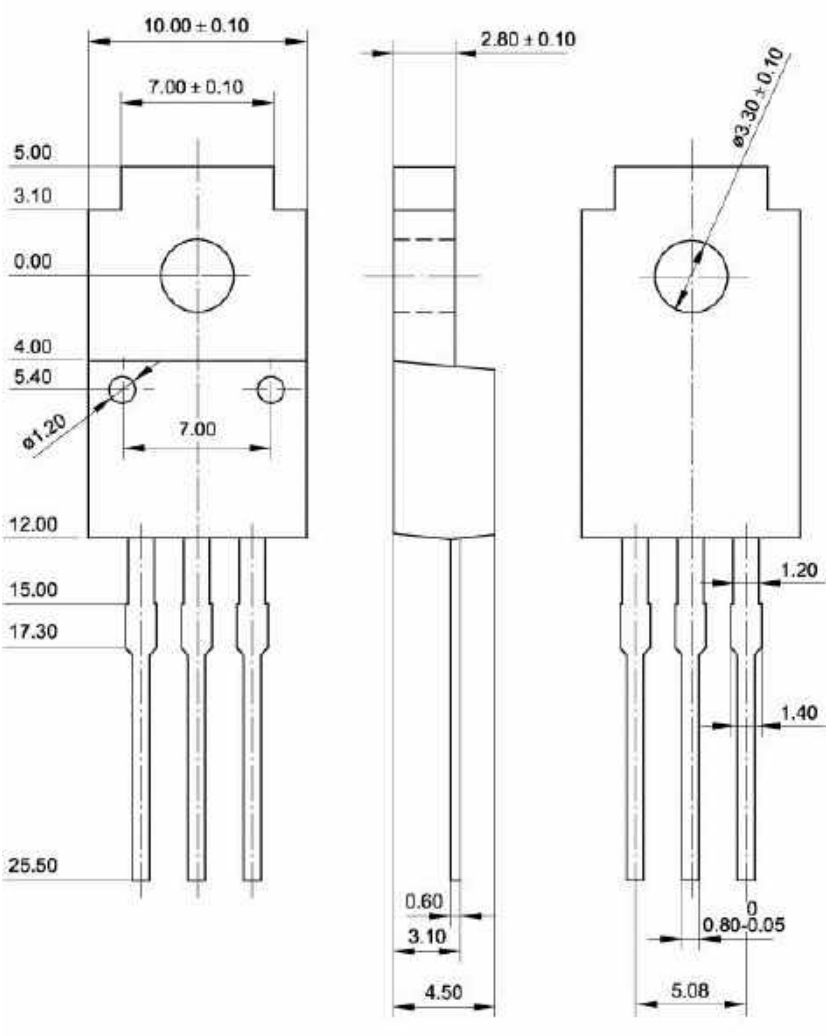

Fig.2 Outline dimensions (unindicated tolerance: ±0.15 mm)