

Silicon NPN Power Transistors

2SD1761

DESCRIPTION

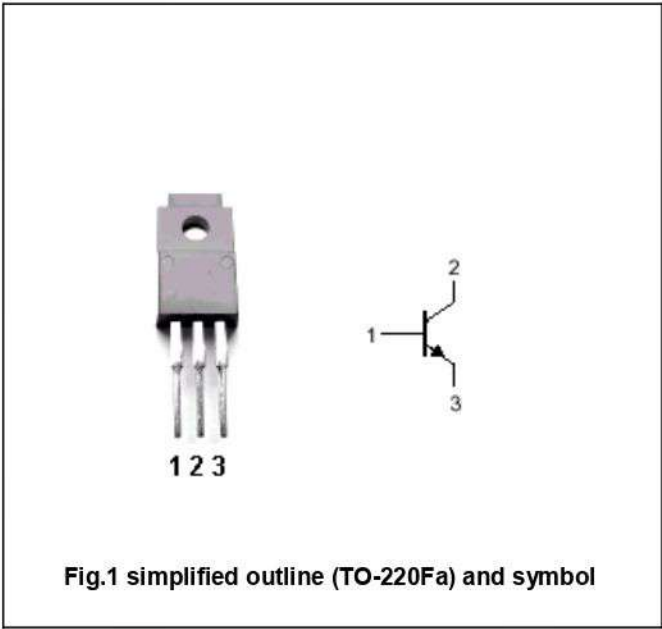
- With TO-220Fa package
- Low collector saturation voltage
- Complement to type 2SB1187
- Wide safe operating area

APPLICATIONS

- For low frequency power amplifier applications

PINNING

PIN	DESCRIPTION
1	Base
2	Collector
3	Emitter



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	℃

Silicon NPN Power Transistors**2SD1761****CHARACTERISTICS****T_j=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	$I_C=50\mu A, I_E=0$	80			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E=50\mu A, I_C=0$	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

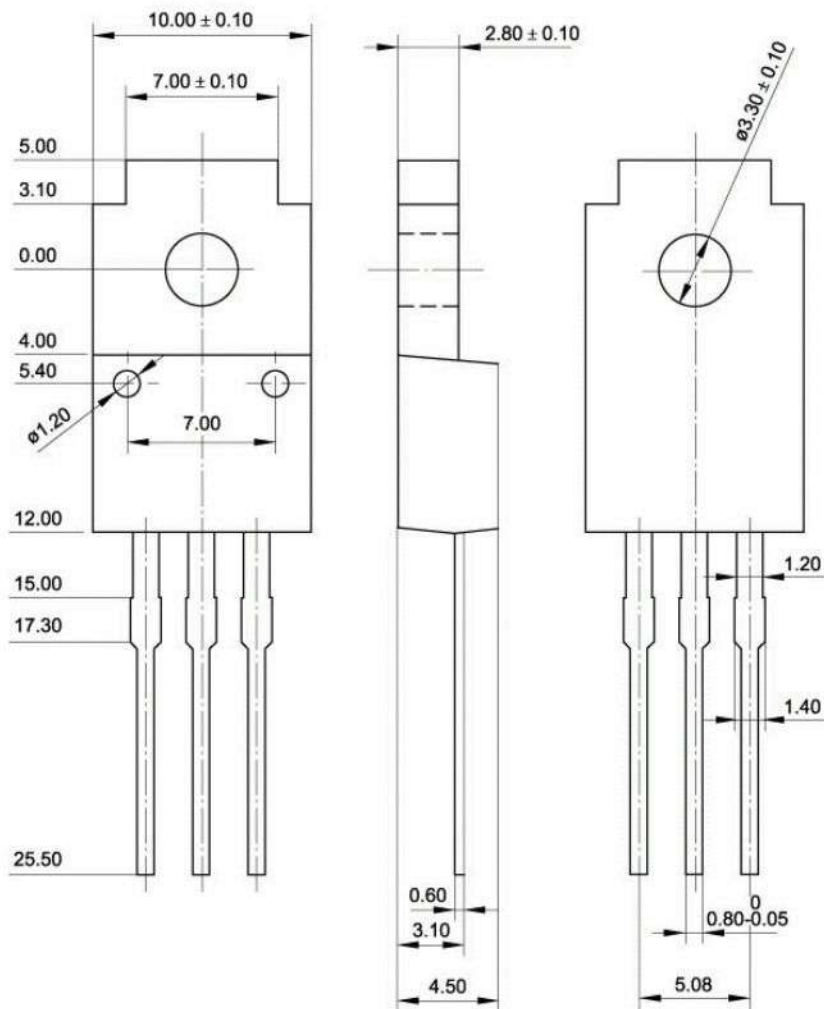
◆ **h_{FE} Classifications**

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

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PACKAGE OUTLINE

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