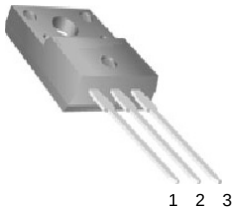
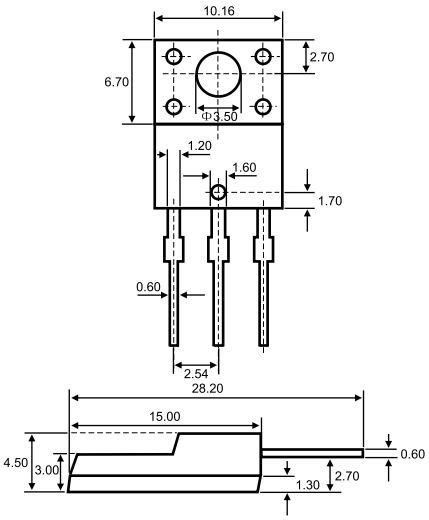
2SB1370(PNP)

TO-220F Bipolar Transistors



1. BASE
2. COLLECTOR
3. EMITTE

TO-220F



Dimensions in inches and (millimeters)

Features

- ✧ **Breakdown Voltage High**
- ✧ **Reverse Cut-off Current Small**
- ✧ **Saturation Voltage Low**
- ✧ **Collector Power dissipation**

P_{CM} : 2 W (Tamb=25℃)

30 W (Tcase=25℃)

MAXIMUM RATINGS (T_A=25℃ unless otherwise noted)

Symbol	Parameter	Value	Units
V_{CBO}	Collector-Base Voltage	-60	V
V_{CEO}	Collector-Emitter Voltage	-60	V
V_{EBO}	Emitter-Base Voltage	-5	V
I_C	Collector Current -Continuous	-3	A
T_J	Junction temperature	150	℃
T_{stg}	Storage temperature	-55-150	℃

ELECTRICAL CHARACTERISTICS (Tamb=25℃ unless otherwise specified)

Parameter	Symbol	Test conditions	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	$V_{(BR)CBO}$	I_C=-50μA, I_E=0	-60			V
Collector-emitter breakdown voltage	$V_{(BR)CEO}$	I_C=-1mA, I_B=0	-60			V
Emitter-base breakdown voltage	$V_{(BR)EBO}$	I_E=-50μA, I_C=0	-5			V
Collector cut-off current	I_{CBO}	V_{CB}=-60V, I_E=0			-10	μA
Emitter cut-off current	I_{EBO}	V_{EB}=-4V, I_C=0			-10	μA
DC current gain	h_{FE} *	V_{CE}=-5V, I_C=-500mA	100		320	
Collector-emitter saturation voltage	$V_{CE(sat)}$ *	I_C=-2A, I_B=-0.2A			-1.5	V
Base-emitter saturation voltage	$V_{BE(sat)}$ *	I_C=-2A, I_B=-0.2A			-1.5	V
Transition frequency	f_T	V_{CE}=-5V, I_C=-500mA,f=5MHz		15		MHz
Out capacitance	Cob	V_{CB}= -10 V ,f=1MH$_Z$		80		pF

***Pulse test: t_p≤300μS, δ≤0.02.**

CLASSIFICATION OF h_{FE}

Rank	E	F
Range	100-200	160-320

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Typical Characteristics