2SB1370 TRANSISTOR (PNP)

TO-220F

1.BASE
2.COLLECTOR
3.EMITTER

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	Unit
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,T_{stg}	Operation Junction and Storage Temperature Range	-55-150	℃

ELECTRICAL CHARACTERISTICS (T_a=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