

Inchange Semiconductor

Product Specification

Silicon PNP Power Transistors

2SB1033

DESCRIPTION

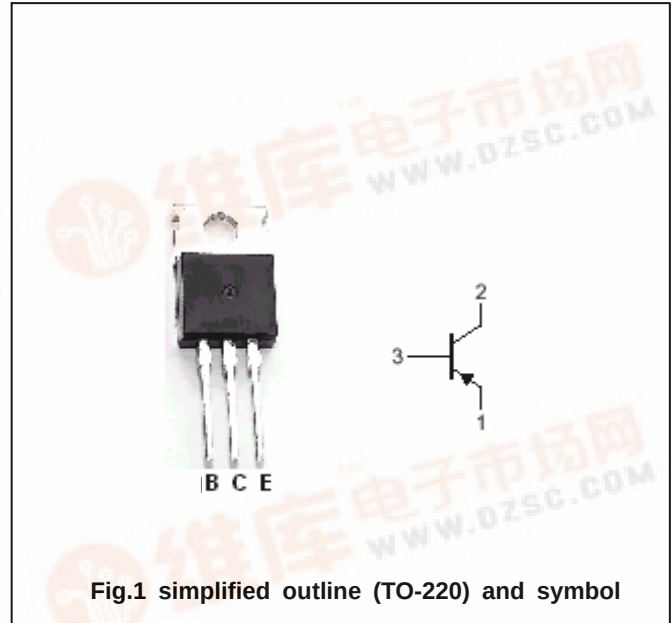
- With TO-220 package
- Complement to type 2SD1437

APPLICATIONS

- For low frequency power amplifier applications

PINNING

PIN	DESCRIPTION
1	Emitter
2	Collector;connected to mounting base
3	Base



Absolute maximum ratings(Ta=25°C)

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
V_{CBO}	Collector-base voltage	Open emitter	-60	V
V_{CEO}	Collector-emitter voltage	Open base	-60	V
V_{EBO}	Emitter-base voltage	Open collector	-5	V
I_C	Collector current		-3	A
P_T	Total power dissipation	$T_C=25^\circ\text{C}$	40	W
T_j	Junction temperature		150	$^\circ\text{C}$
T_{stg}	Storage temperature		-55~150	$^\circ\text{C}$

Silicon PNP Power Transistors

2SB1033

CHARACTERISTICS

Tj=25°C unless otherwise specified

SYMBOL	PARAMETER	CONDITIONS	MIN	TYP.	MAX	UNIT
$V_{(BR)CEO}$	Base-emitter breakdown voltage	$I_C = -25mA, I_B = 0$	-60			V
$V_{(BR)CBO}$	Collector-base breakdown voltage	$I_C = -1mA, I_E = 0$	-60			V
$V_{(BR)EBO}$	Emitter-base breakdown voltage	$I_E = -1mA, I_C = 0$	-5			V
V_{CEsat}	Collector-emitter saturation voltage	$I_C = -2A; I_B = -0.2A$			-1.5	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	$V_{EB} = -5V; I_C = 0$			-10	μA
h_{FE}	DC current gain	$I_C = -0.5A; V_{CE} = -5V$	60		320	
f_T	Transition frequency	$I_C = -0.5A; V_{CE} = -5V$		12		MHz
C_{ob}	Output capacitance	$I_E = 0; V_{CB} = -10V; f = 1MHz$		100		pF

◆ h_{FE} Classifications

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

2SB1033

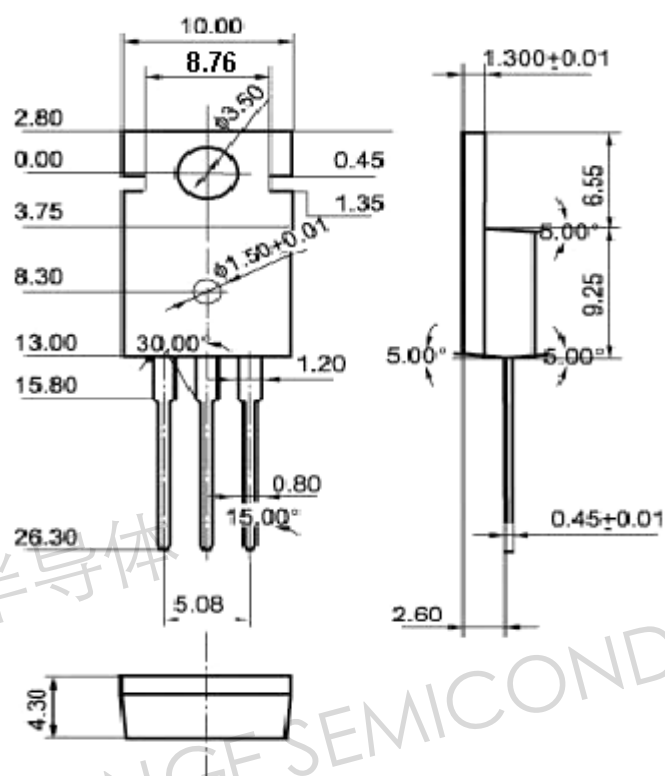


Fig.2 Outline dimensions(unindicated tolerance:±0.10 mm)