



CHENMKO ENTERPRISE CO.,LTD

Lead free devices

SURFACE MOUNT

PNP Medium Power Transistor

VOLTAGE 32 Volts CURRENT 1 Ampere

2SB1132PT

APPLICATION

- * Telephony and professional communication equipment.
- * Other switching applications.

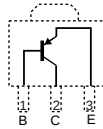
FEATURE

- * Small flat package. (SC-62/SOT-89)
- * High current gain.
- * Suitable for high packing density.
- * Low collector-emitter saturation.
- * High saturation current capability.

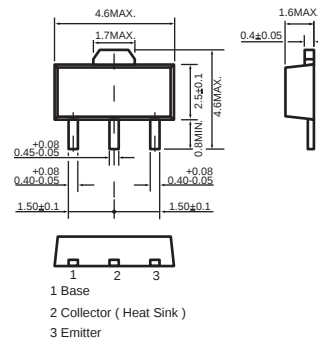
MARKING

- * HFE(P):P32
- * HFE(Q):Q32
- * HFE(R):BAR

CIRCUIT



SC-62/SOT-89



Dimensions in millimeters

SC-62/SOT-89

LIMITING VALUES

In accordance with the Absolute Maximum Rating System (IEC 60134).

SYMBOL	PARAMETER	CONDITIONS	MIN.	MAX.	UNIT
V_{CBO}	collector-base voltage	open emitter	—	-40	V
V_{CEO}	collector-emitter voltage	open base	—	-32	V
V_{EBO}	emitter-base voltage	open collector	—	-5	V
I_C	collector current (DC)		—	-1	A
P_C	Collector power dissipation		—	0.5	W
		Note2	—	2	
T_{stg}	storage temperature		-55	+150	°C
T_j	junction temperature		—	150	°C

Note

1. Transistor mounted on an FR4 printed-circuit board.
2. When mounted on a 40X40X0.7 mm ceramic board.

2004-03

RATING CHARACTERISTIC (2SB1132PT)

THERMAL CHARACTERISTICS CHARACTERISTICS

$T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified.

SYMBOL	PARAMETER	CONDITIONS	MIN.	Typ.	MAX.	UNIT
I_{EBO}	emitter cutoff current	$V_{EB} = -4V$	—	—	-0.5	μA
I_{CBO}	collector cut-off current	$V_{CB} = -20V$	—	—	-0.5	μA
BV_{CBO}	collector-base breakdown voltage	$I_C = -50\mu A$	-40	—	—	V
BV_{CEO}	collector-emitter breakdown voltage	$I_C = -1mA$	-32	—	—	V
BV_{EBO}	emitter-base breakdown voltage	$I_E = -50\mu A$	-5	—	—	V
h_{FE}	DC current transfer ratio	$V_{CE} = -3V$, $I_C = -0.1A$	82	—	390	
V_{CEsat}	collector-emitter saturation voltage	$I_C/I_B = -500mA/-50mA$	—	-200	-500	mV
C_{ob}	collector output capacitance	$I_E = 0$; $V_{CB} = -10V$; $f = 1\text{ MHz}$	—	20	30	pF
f_T	transition frequency	$I_E = 50\text{ mA}$; $V_{CE} = -5\text{ V}$; $f = 30\text{ MHz}$	—	150	—	MHz

Note

1. Pulse test: $t_p \leq 300\text{ }\mu s$; $\delta \leq 0.02$.
2. h_{FE} : Classification P: 82 to 180, Q: 120 to 270, R: 180 to 390

RATING CHARACTERISTIC CURVES (2SB1132PT)

fig1.DCcurrent gain VS. collector current (1)

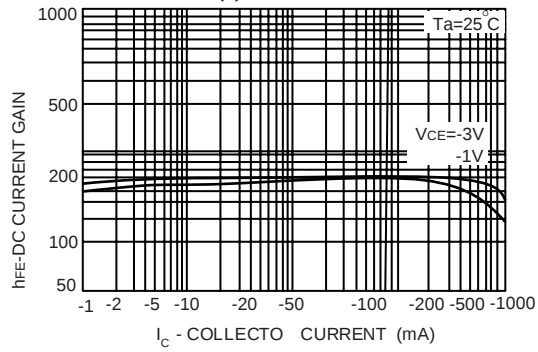


fig2. Collector-emitter saturation voltage VS. collector current

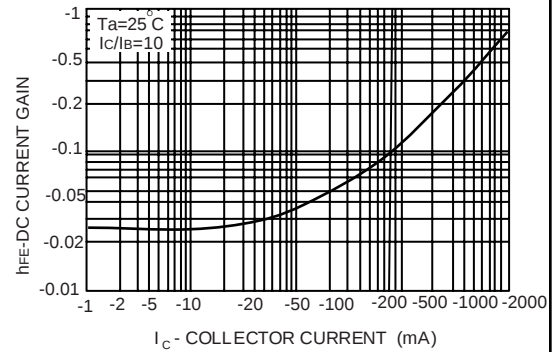


fig3. Gain bandwidth product VS. emitter current

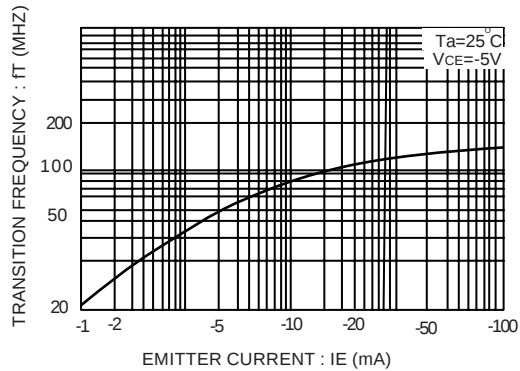


fig4. Collector output capacitance VS. collector-base voltage

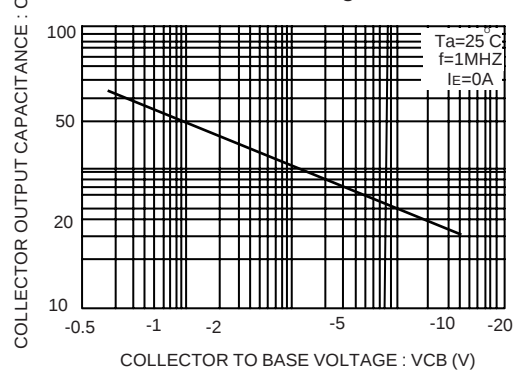


fig5. Grounded emitter output characteristics

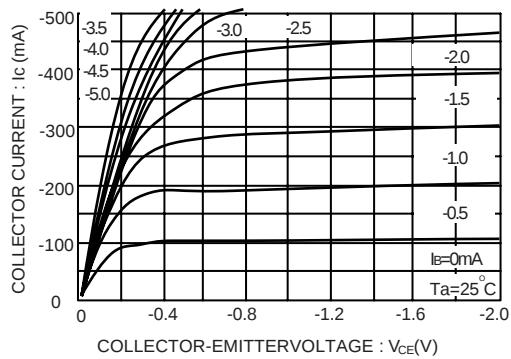


fig6. Grounded emitter propagation characteristics

