



CHENMKO ENTERPRISE CO.,LTD

CH858BPT

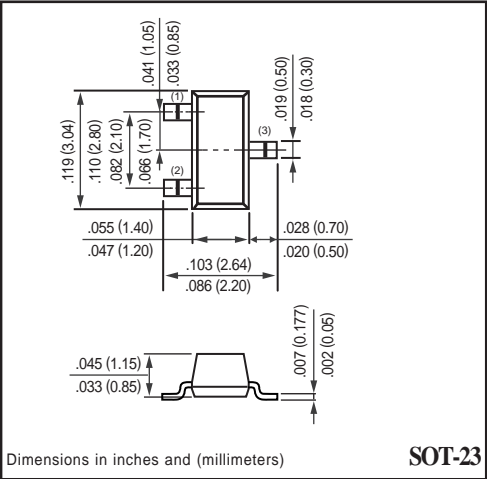
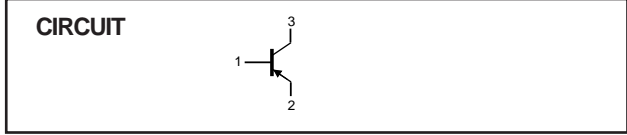
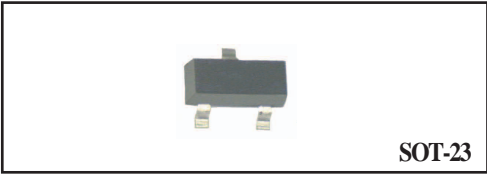
Lead free devices

SURFACE MOUNT
PNP General Purpose Transistor
 VOLTAGE 30 Volts CURRENT 0.1 Ampere

APPLICATION
 * AF input stages and driver applicationon equipment.
 * Other general purpose applications.

FEATURE
 * Small surface mounting type. (SOT-23)
 * High current gain.
 * Suitable for high packing density.
 * Low collector-emitter saturation.
 * High saturation current capability.

MARKING
 * HFE(Q):J18
 * HFE(R):3K
 * HFE(S):J19



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	-	-30	V
V _{CEO}	collector-emitter voltage	open base	-	-30	V
V _{EBO}	emitter-base voltage	open collector	-	-5	V
I _C	collector current (DC)		-	-0.1	A
P _C	Collector power dissipation		-	0.2	W
		Note.2	-	0.35	
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 aX5X0.6mm ceramic board

RATING CHARACTERISTIC (CH858BPT)

THERMAL CHARACTERISTICS CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN.	Typ.	MAX.	UNIT
I_{CBO}	collector cut-off current	$I_E = 0; V_{CB} = 30\text{ V}$	-	-	15	nA
BV_{CBO}	collector-base breakdown voltage	$I_C = -10\mu\text{A}$	-30	-	-	V
BV_{CEO}	collector-emitter breakdown voltage	$I_C = -10\text{mA}$	-30	-	-	V
BV_{EBO}	emitter-base breakdown voltage	$I_E = -1\mu\text{A}$	-5	-	-	V
h_{FE}	DC current transfer ratio	$V_{CE}/I_C = -5\text{V}/-2\text{mA}$	125	-	800	
V_{CEsat}	collector-emitter saturation voltage	$I_C = -10\text{mA}; I_B = -0.5\text{mA}$	-	-	-300	mV
		$I_C = -100\text{mA}; I_B = -5\text{mA}$	-	-	-650	mV
$V_{BE(on)}$	base-emitter saturation voltage	$I_C = -10\text{mA}; V_{CE} = -5.0\text{V}$	-0.6	-	-0.75	V
C_{ob}	collector output capacitance	$I_E = 0; V_{CB} = -10\text{V}; f = 1\text{MHz}$	-	4.5	-	pF
f_T	transition frequency	$I_E = 20\text{mA}; V_{CE} = -5\text{V}; f = 100\text{MHz}$	-	200	-	MHz

Note

1. Pulse test: $t_p \leq 300\text{ }\mu\text{s}; \delta \leq 0.02$.
2. h_{FE} : Classification Q: 125 to 250, R: 220 to 475, S: 420 to 800

RATING CHARACTERISTIC CURVES (CH858BPT)

fig1. Grounded emitter output characteristics (1)

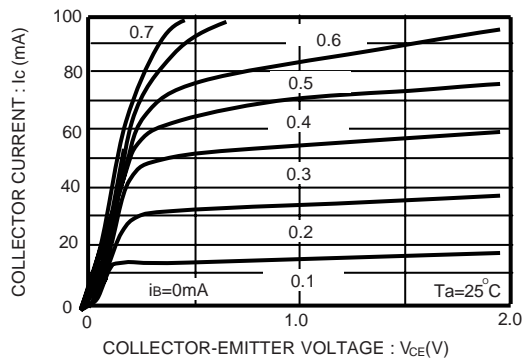
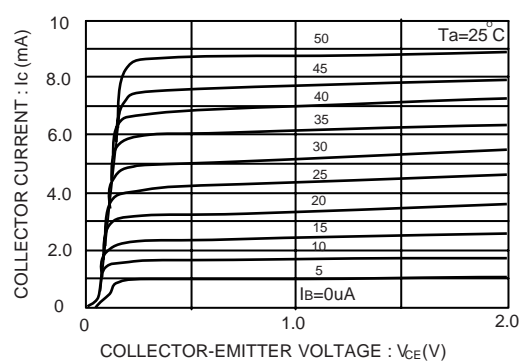


fig2. Grounded emitter output characteristics (2)



RATING CHARACTERISTIC CURVES (CH858BPT)

fig3.DCcurrent gain VS. collector current (1)

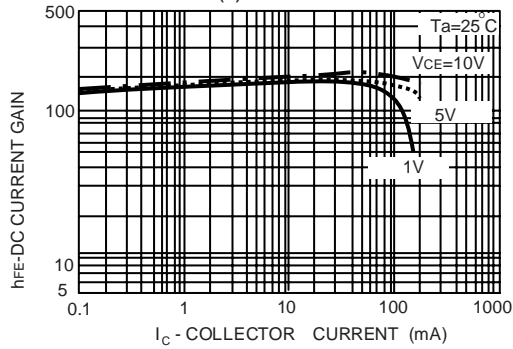


fig4.DCcurrent gain VS. collector current (2)

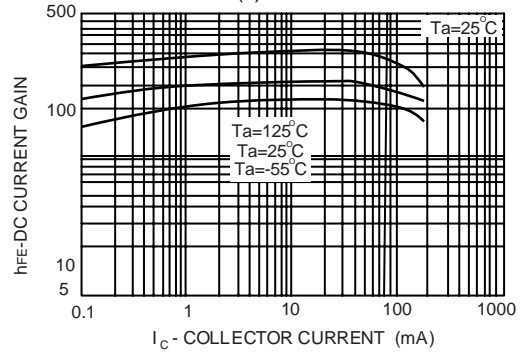


fig5.AC current gain VS. collector current

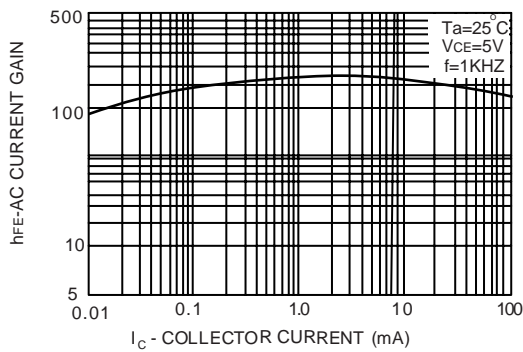


fig6.Collector-emitter saturation voltage VS. collector current

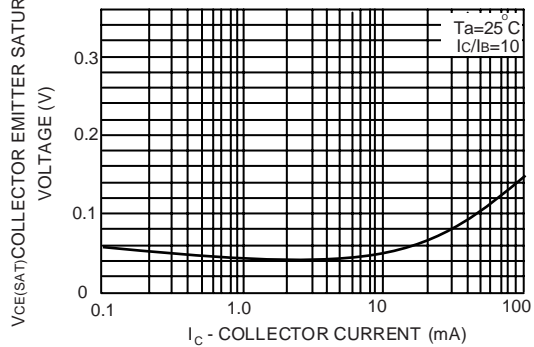


fig7.Bass-emitter saturation voltage VS. collector current

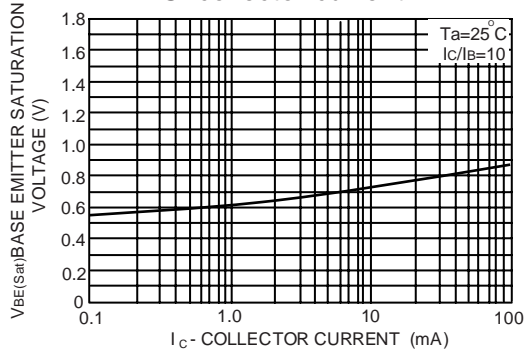
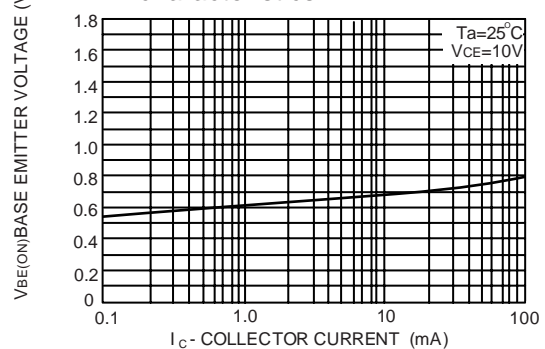


fig8.Grounded emitter propagation characteristics



RATING CHARACTERISTIC CURVES (CH858BPT)

fig9. Input/output capacitance VS. voltage

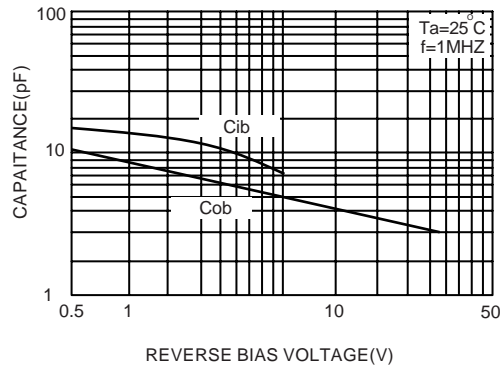


fig10. Gain bandwidth product VS. collector current

