



CHENMKO ENTERPRISE CO.,LTD

Lead free devices

SURFACE MOUNT
PNP Multi-Chip General Purpose Amplifier
 VOLTAGE 45 Volts CURRENT 0.1 Ampere

CHT857BVPT

APPLICATION

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

FEATURE

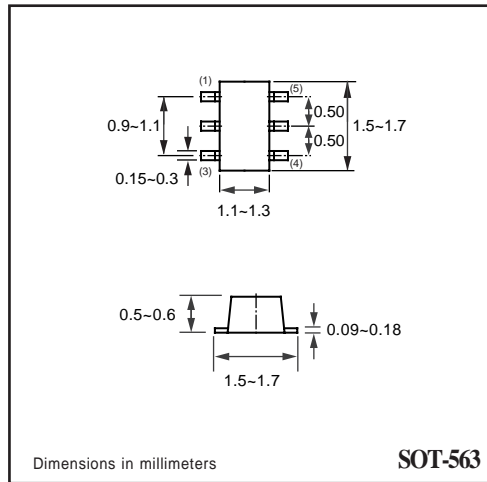
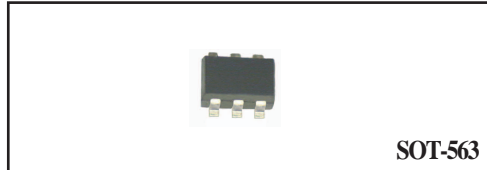
- * Small surface mounting type. (SOT-563)
- * High current gain.
- * Suitable for high packing density.
- * Low collector-emitter saturation.
- * High saturation current capability.
- * Two internal isolated PNP transistors in one package.

CONSTRUCTION

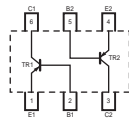
- * Two PNP transistors in one package.

MARKING

- * V4



CIRCUIT



LIMITING VALUES

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

SYMBOL	PARAMETER	CONDITIONS		UNIT
V _{CB0}	collector-base voltage	open emitter	-50	V
V _{CEO}	collector-emitter voltage	open base	-45	V
V _{EBO}	emitter-base voltage	open collector	-5	V
I _C	collector current (DC)		-0.1	A
P _C	Collector power dissipation		150	mW
T _{stg}	storage temperature		-55~+150	°C
T _j	junction temperature		+150	°C

Note

1. Transistor mounted on an FR4 printed-circuit board.

2004-07

RATING CHARACTERISTIC (CHT857BVPT)

THERMAL CHARACTERISTICS CHARACTERISTICS

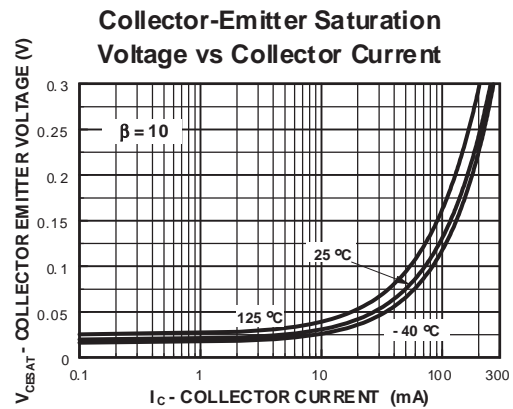
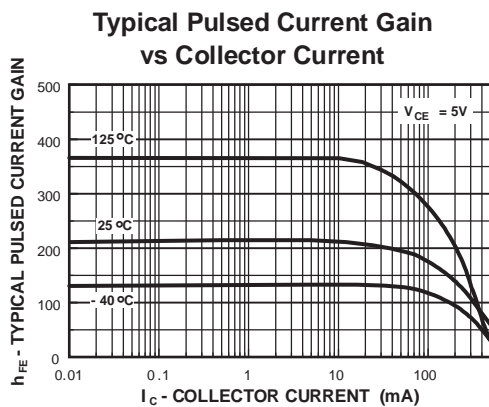
$T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified.

SYMBOL	PARAMETER	CONDITIONS	MIN.	Typ.	MAX.	UNIT
I_{CBO}	collector cut-off current	$I_E = 0; V_{CB} = -30\text{ V}$	-	-	-15	nA
		$I_C = 0; V_{CB} = -30\text{ V}; T_A = 150\text{ }^{\circ}\text{C}$	-	-	-5	μA
BV_{CBO}	collector-base breakdown voltage	$I_C = -10\text{ }\mu\text{A}$	-50	-	-	V
BV_{CEO}	collector-emitter breakdown voltage	$I_C = -10\text{ mA}$	-45	-	-	V
BV_{EBO}	emitter-base breakdown voltage	$I_E = -1\text{ }\mu\text{A}$	-5	-	-	V
h_{FE}	DC current transfer ratio	$V_{CE}/I_C = -5\text{V}/-2\text{ mA}$	-200	-	-450	
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_{BEsat}	base-emitter saturation voltage	$I_C = -10\text{ mA}; I_B = -0.5\text{ mA}$	-	-700	-	mV
C_{ib}	emitter input capacitance	$I_C = 0; V_{CB} = -0.5\text{ V}; f = 1\text{ MHz}$	-	8	-	pF
C_{ob}	collector output capacitance	$I_E = 0; V_{CB} = -10\text{ V}; f = 1\text{ MHz}$	-	3	-	pF
f_T	transition frequency	$I_E = -20\text{ mA}; V_{CE} = 5\text{ V}; f = 100\text{ MHz}$	-	200	-	MHz

Note

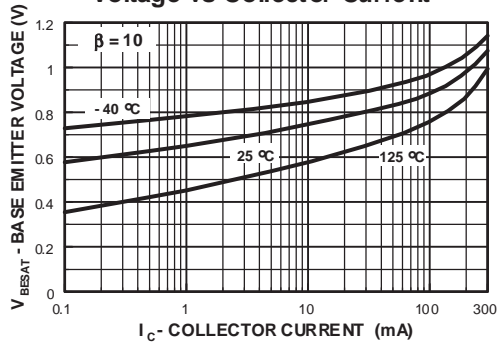
1. Pulse test: $t_p \leq 300\text{ }\mu\text{s}$; $\delta \leq 0.02$.

RATING CHARACTERISTIC CURVES (CHT857BVPT)

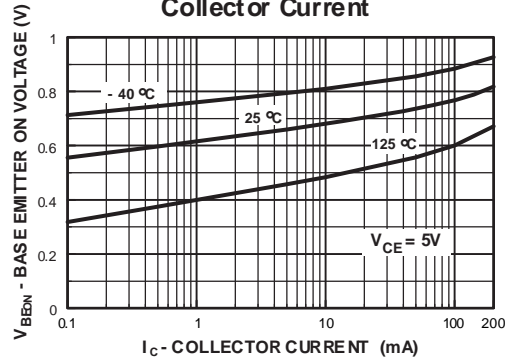


RATING CHARACTERISTIC CURVES (CHT857BVPT)

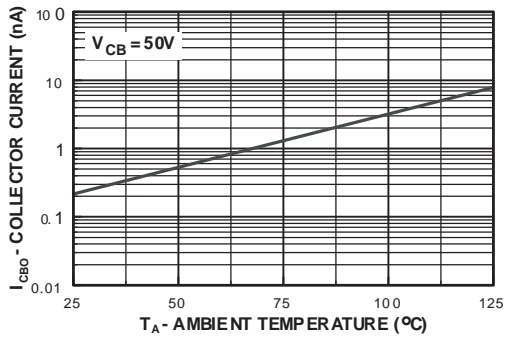
Base-Emitter Saturation Voltage vs Collector Current



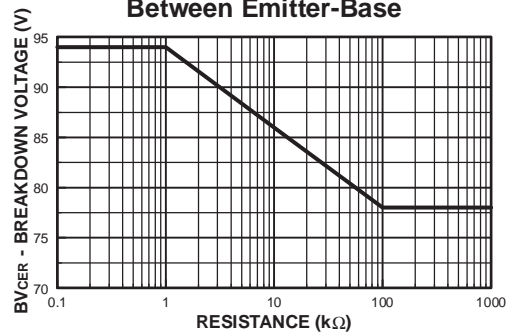
Base Emitter ON Voltage vs Collector Current



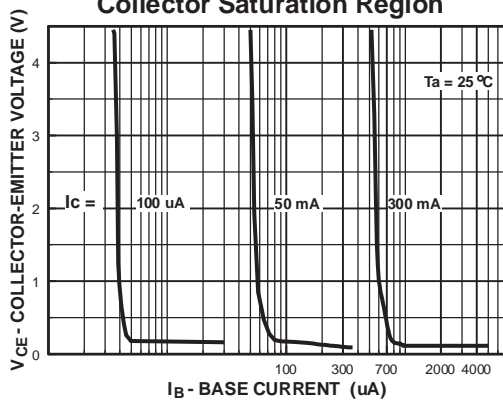
Collector-Cutoff Current vs Ambient Temperature



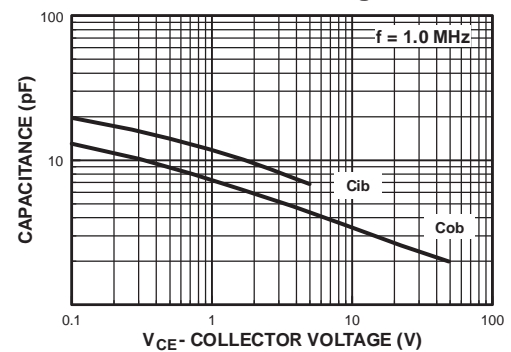
Collector-Emitter Breakdown Voltage with Resistance Between Emitter-Base



Collector Saturation Region

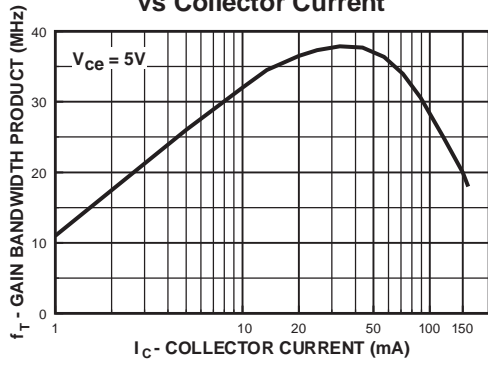


Input and Output Capacitance vs Reverse Voltage

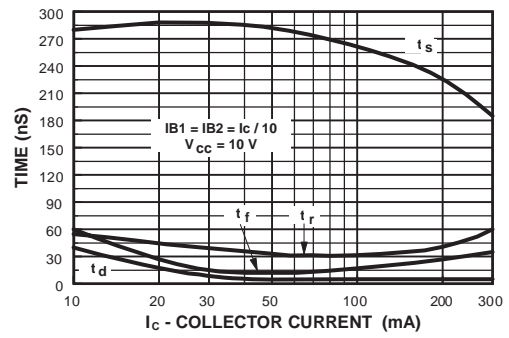


RATING CHARACTERISTIC CURVES (CHT857BVPT)

Gain Bandwidth Product vs Collector Current



Switching Times vs Collector Current



Power Dissipation vs Ambient Temperature

