CHENMKO ENTERPRISE CO.,LTD

CHT1198PT

Lead free devices

SURFACE MOUNT
PNP Switching Transistor

VOLTAGE 80 Volts CURRENT 0.5 Ampere

FEATURE

* Small surface mounting type. (SOT-23)
* Low Collector-Emitter saturation voltage.
* High breakdown voltage.

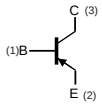
CONSTRUCTION

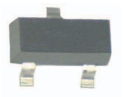
* PNP Silicon Transistor

MARKING

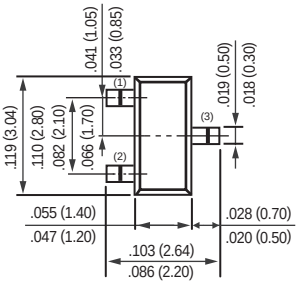
* J22 @hFE as Q Grade
* J23 @hFE as R Grade

CIRCUIT





SOT-23



Dimensions in inches and (millimeters)

SOT-23

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	–	-80	V
V_{CEO}	collector-emitter voltage	open base	–	-80	V
V_{EBO}	emitter-base voltage	open collector	–	-5	V
I_C	collector current DC		–	-0.5	A
P_{tot}	total power dissipation	$T_{amb} \leq 25$ °C; note 1	–	200	mW
T_{stg}	storage temperature		–65	+150	°C
T_j	junction temperature		–	150	°C

Note

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

RATING CHARACTERISTIC CURVES (CHT1198PT)

ELECTRICAL CHARACTERISTICS

T_{amb} = 25 °C unless otherwise noted.

SYMBOL	PARAMETER	CONDITIONS	MIN.	MAX.	UNIT
BV_{CBO}	collector-base breakdown voltage	I_E = 0; I_C =-50 uA	-80	–	V
BV_{CEO}	collector-emitter breakdown voltage	I_B = 0; I_C =-2 mA	-80	–	V
BV_{EBO}	emitter-base breakdown voltage	I_C = 0; I_E =-50 uA	-5	–	V
I_{CBO}	collector cut-off current	I_E = 0; V_{CB} = - 50 V	–	-500	nA
I_{EBO}	emitter cut-off current	I_C = 0; V_{EB} = - 4 V	–	-500	nA
h_{FE}	DC current gain	V_{CE} = -3V; note 1 I_C = -100 mA	120	390	
V_{CEsat}	collector-emitter saturation voltage	I_C = -500 mA, I_B=-50 mA	–	-500	mV
C_c	collector capacitance	I_E = i_e = 0; V_{CB} =-10 V ; f = 1 MHz	–	11Typ.	pF
f_T	transition frequency	I_E = 50 mA; V_{CE} = - 10 V ; f = 100 MHz	–	180Typ.	MHz

Note

1. Pulse test: $t_p \leq 300\ \mu s$; $\delta \leq 0.02$.
2. hFE: Q Gade: 120~270
   R Gade: 180~390

RATING CHARACTERISTIC CURVES (CHT1198PT)

Figure 1. Grounded Emitter Propagation Characteristics

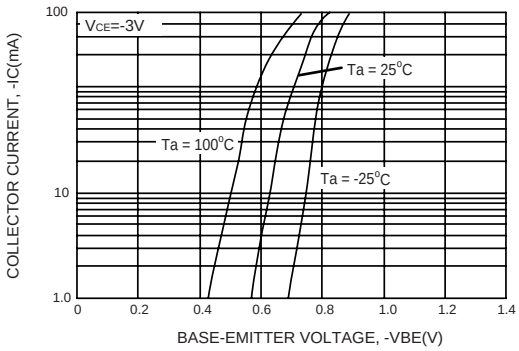


Figure 2. Collector-Emitter Saturation Voltage vs Collector Current

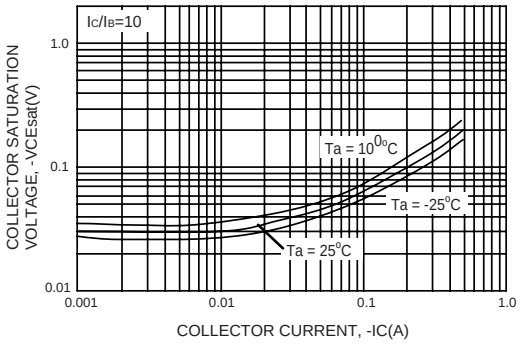


Figure 3. DC Current Gain