CHENMKO ENTERPRISE CO.,LTD

CHT8050PT

SURFACE MOUNT
EPITAXIAL Transistor

VOLTAGE 20 Volts CURRENT 700 mAmpere

Lead free devices

FEATURE

* Small surface mounting type. (SOT-23)
* High DC current .

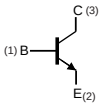
CONSTRUCTION

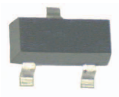
* NPN transistors in one package.

MARKING

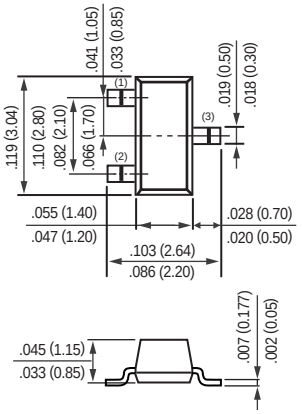
* D805
* E805

CIRCUIT





SOT-23



Dimensions in 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	–	25	V
V_{CEO}	collector-emitter voltage	open base	–	20	V
V_{EBO}	emitter-base voltage	open collector	–	5	V
I_C	collector current (DC)		–	700	mA
P_{tot}	total power dissipation	$T_{amb} \leq 25$ °C; note 1	–	225	mW
T_{stg}	storage temperature		–55	+150	°C
T_j	junction temperature		–	150	°C
T_{amb}	operating ambient temperature		–55	+150	°C

Note

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

RATING CHARACTERISTIC CURVES (CHT8050PT)

CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN.	MAX.	UNIT
$V_{(BR)CBO}$	collector-base breakdown voltage	I_C = -10uA ; I_E = 0A	25	–	V
$V_{(BR)CEO}$	collector-emitter breakdown voltage	I_C = -1mA ; I_B = 0A	20	–	V
$V_{(BR)EBO}$	emitter-base breakdown voltage	I_E = -10uA ; I_C = 0A	5	–	V
I_{CBO}	collector cut-off current	V_{CB} = 20V	–	1.0	uA
I_{EBO}	emitter cut-off current	V_{EB} = 5V	–	100	nA
h_{FE}	DC current gain	I_C = 150 mA; V_{CE} = 1V	150	500	
V_{CEsat}	collector-emitter saturation	I_C = 500 mA; I_B = 50 mA	–	500	mV
V_{BEon}	base-emitter voltage	I_C = 150 mA; V_{CE} = 1.0V	–	1000	mV
C_{cb}	output capacitance	V_{CB}=-10V; f=1.0MHZ; I_E=0	–	10	pF
f_T	transition frequency	V_{CB}=10V; Ic=20mA; f=100MHz	150	–	MHz

2. hFE: D Classification: 150~300
   E Classification: 250~500

RATING CHARACTERISTIC CURVES (CHT8050PT)

Figure 1. Collector-Emitter Saturation Voltage vs Collector Current

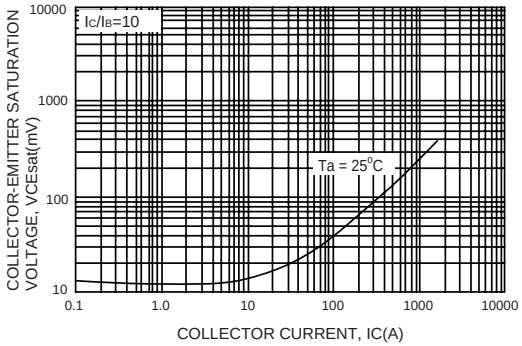


Figure 2. Base-Emitter Saturation Voltage vs Collector Current

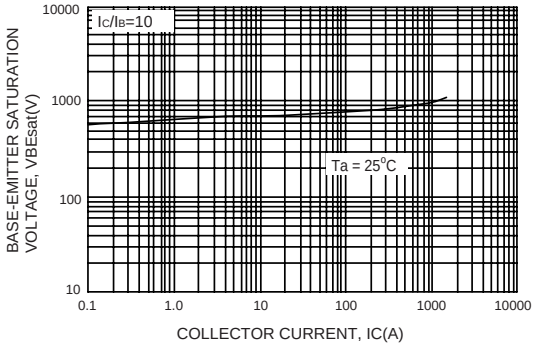


Figure 3. DC Current Gain