



**CHENMKO ENTERPRISE CO.,LTD**

**SURFACE MOUNT  
EPITAXIAL Transistor**

VOLTAGE 20 Volts CURRENT 700 mAmpere

**CHT8550PT**

Lead free devices

**FEATURE**

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

**CONSTRUCTION**

- \* PNP transistors in one package.

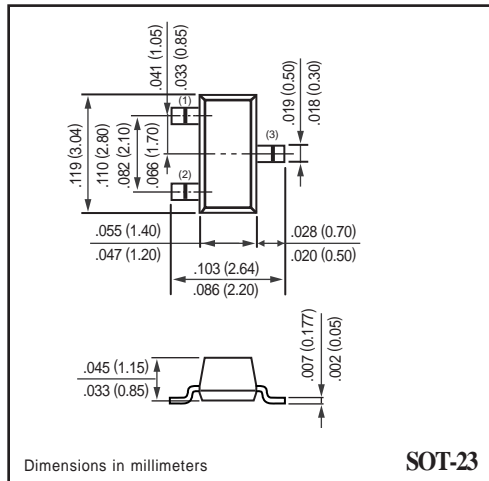
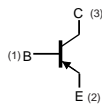
**MARKING**

- \* C855
- \* D855
- \* E855



**SOT-23**

**CIRCUIT**



Dimensions in millimeters

**SOT-23**

**LIMITING VALUES**

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

SYMBOL	PARAMETER	CONDITIONS	MIN.	MAX.	UNIT
V <sub>CBO</sub>	collector-base voltage	open emitter	-	-25	V
V <sub>CEO</sub>	collector-emitter voltage	open base	-	-20	V
V <sub>EBO</sub>	emitter-base voltage	open collector	-	-5	V
I <sub>C</sub>	collector current (DC)		-	-700	mA
P <sub>tot</sub>	total power dissipation	T <sub>amb</sub> ≤ 25 °C; note 1	-	225	mW
T <sub>stg</sub>	storage temperature		-55	+150	°C
T <sub>j</sub>	junction temperature		-	150	°C
T <sub>amb</sub>	operating ambient temperature		-55	+150	°C

**Note**

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

## RATING CHARACTERISTIC CURVES ( CHT8550PT )

### CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN.	MAX.	UNIT
$V_{(BR)CBO}$	collector-base breakdown voltage	$I_C = -10\mu\text{A}$ ; $I_E = 0\text{A}$	-25	–	V
$V_{(BR)CEO}$	collector-emitter breakdown voltage	$I_C = -1\text{mA}$ ; $I_B = 0\text{A}$	-20	–	V
$V_{(BR)EBO}$	emitter-base breakdown voltage	$I_E = -10\mu\text{A}$ ; $I_C = 0\text{A}$	-5	–	V
$I_{CBO}$	collector cut-off current	$V_{CB} = -20\text{V}$	–	-1.0	$\mu\text{A}$
$I_{EBO}$	emitter cut-off current	$V_{EB} = -6\text{V}$	–	-100	nA
$h_{FE}$	DC current gain	$I_C = -150\text{ mA}$ ; $V_{CE} = -1\text{V}$	100	500	
$V_{CEsat}$	collector-emitter saturation	$I_C = -500\text{ mA}$ ; $I_B = -50\text{ mA}$	–	-500	mV
$V_{BEon}$	base-emitter voltage	$I_C = -150\text{ mA}$ ; $V_{CE} = -1.0\text{V}$	–	-1000	mV
$C_{cb}$	output capacitance	$V_{CB} = -10\text{V}$ ; $f = 1.0\text{MHz}$ ; $I_E = 0$	–	10	pF
$f_T$	transition frequency	$V_{CB} = -10\text{V}$ ; $I_C = -20\text{mA}$ ; $f = 100\text{MHz}$	150	–	MHz

2.  $h_{FE}$ : C Classification: 100–200  
 D Classification: 150–300  
 E Classification: 250–500

## RATING CHARACTERISTIC CURVES ( CHT8550PT )

Figure 1. Collector-Emitter Saturation Voltage vs Collector Current

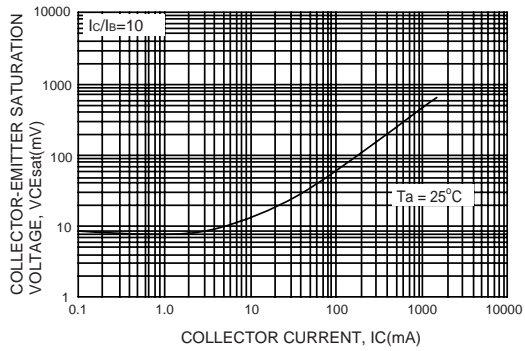


Figure 2. Base-Emitter Saturation Voltage vs Collector Current

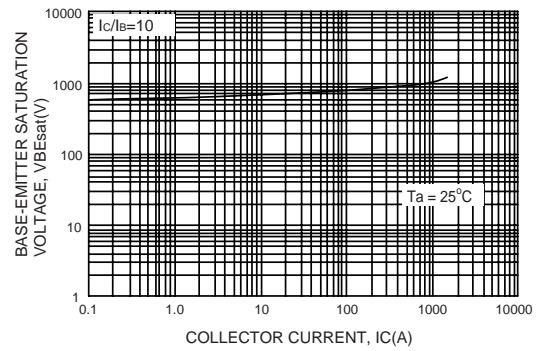


Figure 3. DC Current Gain

