



**CHENMKO ENTERPRISE CO.,LTD**

**CHT55N1PT**

*Lead free devices*

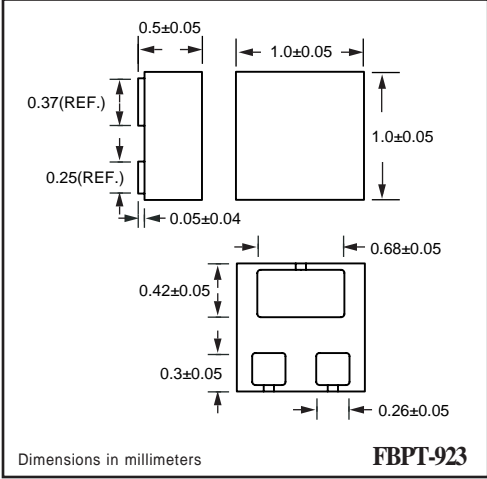
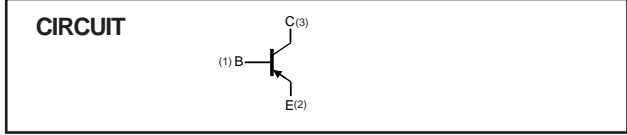
**SURFACE MOUNT**  
**PNP General Purpose Transistor -**  
**VOLTAGE 60 Volts CURRENT 0.5 Ampere**

**APPLICATION**  
 \* General purpose applications.

**FEATURE**  
 \* Small surface mounting type. (FBPT-923)  
 \* Low current (Max.=500mA).  
 \* Suitable for high packing density.  
 \* Low voltage (Max.=60V) .  
 \* High saturation current capability.

**CONSTRUCTION**  
 \* PNP General Purpose Transistor

**FBPT-923**



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

SYMBOL	PARAMETER	CONDITIONS	MIN.	MAX.	UNIT
V <sub>CB0</sub>	collector-base voltage	open emitter	-	-60	V
V <sub>CE0</sub>	collector-emitter voltage	open base	-	-60	V
V <sub>EB0</sub>	emitter-base voltage	open collector	-	-4	V
I <sub>C</sub>	collector current DC		-	-500	mA
I <sub>CM</sub>	peak collector current		-	-500	mA
I <sub>BM</sub>	peak base current		-	-100	mA
P <sub>tot</sub>	total power dissipation	T <sub>amb</sub> ≤ 25 °C; note 1	-	100	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.

2006-07

## RATING CHARACTERISTIC CURVES ( CHT55N1PT )

### THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$R_{th\ j-a}$	thermal resistance from junction to ambient	note 1	357	K/W

#### Note

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

### CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN.	MAX.	UNIT
$I_{CBO}$	collector cut-off current	$I_E = 0; V_{CB} = -60\text{ V}$	–	-0.1	$\mu\text{A}$
$I_{EBO}$	emitter cut-off current	$I_C = 0; V_{EB} = 60\text{ V}$	–	-0.1	$\mu\text{A}$
$h_{FE}$	DC current gain	$V_{CE} = -1.0\text{ V}$ ; note 1 $I_C = -10\text{ mA}$ $I_C = -100\text{ mA}$	100 100	– –	
$V_{CEsat}$	collector-emitter saturation voltage	$I_C = -100\text{ mA}; I_B = -10\text{ mA}$	–	-0.25	V
$V_{BEsat}$	base-emitter saturation voltage	$I_C = -100\text{ mA}; V_{CE} = -1.0\text{ V}$	–	-1.2	V
$C_{cb}$	collector-base capacitance	$I_E = i_e = 0; V_{CB} = -20\text{ V}; f = 1\text{ MHz}$	–	3	pF
$f_T$	transition frequency	$I_C = 100\text{ mA}; V_{CE} = -1.0\text{ V}; f = 100\text{ MHz}$	50	–	MHz

#### Note

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