



CHENMKO ENTERPRISE CO.,LTD

Lead free devices

**SURFACE MOUNT
NPN SILICON Transistor**

VOLTAGE 200 Volts CURRENT 0.6 Ampere

CHT2000ZPT

APPLICATION

- * Telephony and professional communication equipment.
- * Other switching applications.

FEATURE

- * Small flat package. (SC-73/SOT-223)
- * Suitable for high packing density.
- * High saturation current capability.

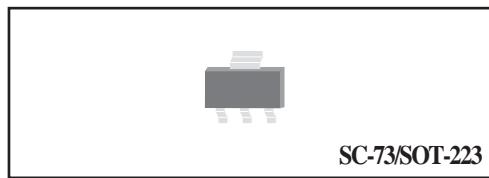
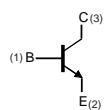
CONSTRUCTION

- * NPN SILICON Transistor

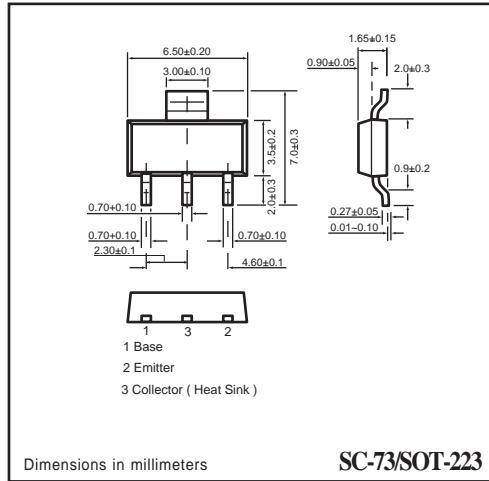
MARKING

ZMN

CIRCUIT



SC-73/SOT-223



Dimensions in millimeters

SC-73/SOT-223

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	—	200	V
V_{CEO}	collector-emitter voltage	open base	—	200	V
V_{EBO}	emitter-base voltage	open collector	—	10	V
I_C	collector current (DC)		—	600	mA
P_{tot}	total power dissipation	$T_{amb} \leq 25^\circ\text{C}$; note 1	—	2	W
T_{stg}	storage temperature		-65	+150	$^\circ\text{C}$
T_j	junction temperature		—	150	$^\circ\text{C}$
T_{amb}	operating ambient temperature		-65	+150	$^\circ\text{C}$

Note

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

RATING CHARACTERISTIC CURVES (CHT2000ZPT)

CHARACTERISTICS

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

SYMBOL	PARAMETER	CONDITIONS	MIN.	MAX.	UNIT
I_{CBO}	collector cut-off current	$V_{CB} = 180\text{ V}$	—	500	nA
I_{EBO}	emitter cut-off current	$V_{EB} = 10\text{V}$	—	100	nA
h_{FE}	DC current gain	$I_C = 100\mu\text{A}; V_{CE} = 5\text{V}$ $I_C = 10\text{mA}; V_{CE} = 5\text{V}$ $I_C = 160\text{mA}; V_{CE} = 5\text{V}$	3000 3000 3000	— — —	
V_{CEsat}	collector-emitter saturation voltage	$I_C = 20\text{ mA}; I_B = 25\mu\text{A}$	—	0.9	V
		$I_C = 80\text{ mA}; I_B = 40\mu\text{A}$	—	1.1	V
		$I_C = 160\text{mA}; I_B = 100\mu\text{A}$	—	1.2	V
V_{BEON}	base-emitter saturation voltage	$V_{CE}=5\text{V}, I_C=160\text{mA}$	—	2.0	V