



CHENMKO ENTERPRISE CO.,LTD

CHTA27ZPT

**SURFACE MOUNT
NPN SILICON Transistor**

VOLTAGE 60 Volts CURRENT 0.5 Ampere

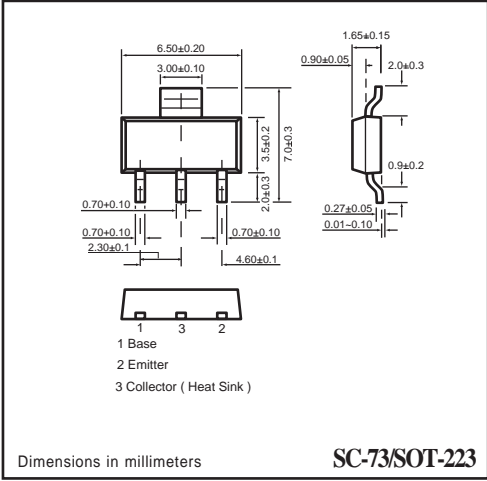
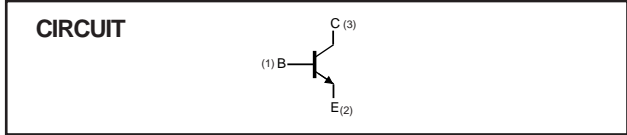
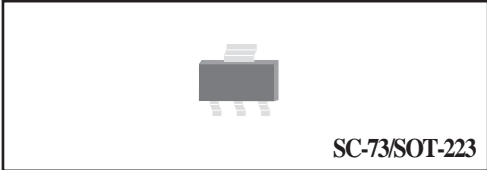
Lead free devices

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

FEATURE
 * Small flat package. (SC-73/SOT-223)
 * Suitable for high packing density.

CONSTRUCTION
 *NPN SILICON Transistor

MARKING
 * ZKN



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

SYMBOL	PARAMETER	CONDITIONS	MIN.	MAX.	UNIT
V _{CB0}	collector-base voltage	open emitter	—	60	V
V _{CEO}	collector-emitter voltage	open base	—	60	V
V _{EBO}	emitter-base voltage	open collector	—	10	V
I _C	collector current (DC)		—	500	mA
P _{tot}	total power dissipation	T _{amb} ≤ 25 °C; note 1	—	2	W
T _{stg}	storage temperature		-65	+150	°C
T _j	junction temperature		—	150	°C
T _{amb}	operating ambient temperature		-65	+150	°C

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

RATING CHARACTERISTIC CURVES (CHTA27ZPT)

THEMAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$R_{th\ j-a}$	thermal resistance from junction to ambient	note 1	104	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	$V_{CB} = 50\text{ V}$	–	100	nA
I_{EBO}	emitter cut-off current	$V_{EB} = 10\text{ V}$	–	100	nA
h_{FE}	DC current gain	$I_C = 10\text{ mA}; V_{CE} = 5\text{ V}$ $I_C = 100\text{ mA}; V_{CE} = 5\text{ V}$	10000 10000	– –	
$V_{CE(sat)}$	collector-emitter saturation voltage	$I_C = 100\text{ mA}; I_B = 0.1\text{ mA}$	–	1.5	V
$V_{BE(ON)}$	base-emitter saturation voltage	$I_C = 100\text{ mA}; V_{CE} = 5\text{ V}$	–	2	V
f_T	transition frequency	$I_C = 10\text{ mA}; V_{CE} = 5\text{ V};$ $f = 100\text{ MHz}$	125	–	MHz