CHENMKO ENTERPRISE CO.,LTD

CHTNAHZGP-A

Halogens free devices

SURFACE MOUNT
NPN Switching Transistor

VOLTAGE 80 Volts CURRENT 1 Ampere

APPLICATION

* Telephony and proferssional communction equipment.
* Other switching applications.

FEATURE

* Suitable for high packing density.
* High saturation current capability.
* Voltage controlled small signal switch.

CONSTRUCTION

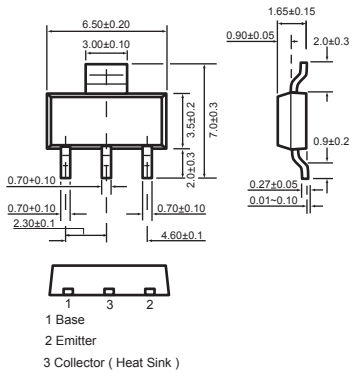
* NPN Switching Transistor

MARKING

BCP56



SC-73/SOT-223

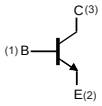


1 Base
2 Emitter
3 Collector (Heat Sink)

Dimensions in millimeters

SC-73/SOT-223

CIRCUIT



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	–	120	V
V_{CEO}	collector-emitter voltage	open base	–	80	V
V_{EBO}	emitter-base voltage	open collector	–	7.0	V
I_C	collector current (DC)		–	1000	mA
I_{CM}	peak collector current		–	1500	mA
P_{tot}	total power dissipation	$T_{amb} \leq 25$ °C; note 1	–	2.0	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 (CHTNAHZGP-A)

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$R_{th\ j\text{-}a}$	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 °C unless otherwise speciÞed.

SYMBOL	PARAMETER	CONDITIONS	MIN.	MAX.	UNIT
I_{CBO}	collector cut-off current	I_E = 0; V_{CB} = 90 V	–	10	nA
I_{EBO}	emitter cut-off current	I_C = 0; V_{EB} = 5 V	–	10	nA
h_{FE}	DC current gain	I_C = 0.1 mA; V_{CE} = 10V I_C = 1.0 mA; V_{CE} = 10V I_C = 150 mA; V_{CE} =10V I_C = 500 mA; V_{CE} = 10V I_C = 1.0 A; V_{CE} = 10V	50 90 100 50 15	– – 300 – –	
V_{CEsat}	collector-emitter saturation voltage	I_C = 150 mA; I_B = 15 mA	–	0.2	V
		I_C =500 mA; I_B = 50 mA	–	0.5	V
V_{BEsat}	base-emitter saturation voltage	I_C =150 mA; I_B =15 mA	–	1.1	V
C_{ob}	collector capacitance	I_E = i_e = 0; V_{CB} = 1 0 V; f = 1 MHz	–	12	pF
C_{ib}	emitter capacitance	I_C = i_c = 0; V_{BE} = 500 mV; f = 1 MHz	–	60	pF
f_T	transition frequency	I_C = 50 mA; V_{CE} = 1 0 V; f = 1.0 MHz	100	–	MHz
F	noise Þgure	I_C = 100 µA; V_{CE}= 1 0 V; R_S = 1 kΩ; f = 1.0kHz	–	4.0	dB

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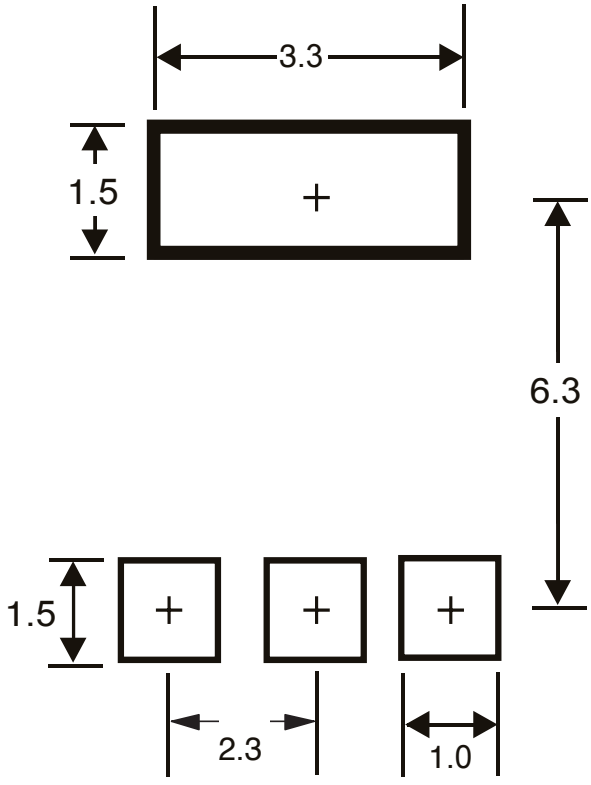
SURFACE MOUNT

RECOMMENDED FOOT PRINT

all dimensions in mm

SOT223

SOT223



The Marking and Part No. for CHTNAHZGP-A

(SOT-223)

Marking:



Part No.:

BCP56

Marking Code (不會變更)

X

Date Code(會變更)

Date Code Standard

Date Code	A	B	C	D	E	F	G	H	J	K	L	M
2015Year	JAN.	FEB.	MAR.	APR	MAY	JUNE	JULY	AUG.	SEP.	OCT	NOV.	DEC.

Date Code	N	P	Q	R	S	T	U	V	W	X	Y	Z
2014Year	JAN.	FEB.	MAR.	APR	MAY	JUNE	JULY	AUG.	SEP.	OCT	NOV.	DEC.

CUSTOMER :	APPROVED : DANY	CHENMKO LTD.
APPROVED :	CHECKED : ANGEL	
CHECKED :	DRAWN : BEN	DRAWING No. :