



CHENMKO ENTERPRISE CO.,LTD

Halogens free devices

SURFACE MOUNT
NPN Switching Transistor

VOLTAGE 80 Volts CURRENT 1 Ampere

CHTNAHXGP-A

APPLICATION

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

FEATURE

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

CONSTRUCTION

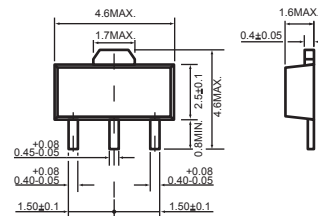
- * NPN Switching Transistor

MARKING

XCN



SC-62/SOT-89

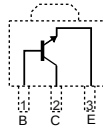


1 Base
2 Collector (Heat Sink)
3 Emitter

Dimensions in millimeters

SC-62/SOT-89

CIRCUIT



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	—	120	V
V_{CE0}	collector-emitter voltage	open base	—	80	V
V_{EB0}	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	$T_{amb} \leq 25\text{ }^{\circ}\text{C}$; note 1	—	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 (CHTNAHXGP-A)

THERMAL CHARACTERISTICS

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

Note

- 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	$I_E = 0; V_{CB} = 90\text{ V}$	–	10	nA
I_{EBO}	emitter cut-off current	$I_C = 0; V_{EB} = 5\text{ V}$	–	10	nA
h_{FE}	DC current gain	$I_C = 0.1\text{ mA}; V_{CE} = 10\text{ V}$ $I_C = 1.0\text{ mA}; V_{CE} = 10\text{ V}$ $I_C = 150\text{ mA}; V_{CE} = 10\text{ V}$ $I_C = 500\text{ mA}; V_{CE} = 10\text{ V}$ $I_C = 1.0\text{ A}; V_{CE} = 10\text{ V}$	50 90 100 50 15	– – 300 – –	
V_{CEsat}	collector-emitter saturation voltage	$I_C = 150\text{ mA}; I_B = 15\text{ mA}$	–	0.2	V
		$I_C = 500\text{ mA}; I_B = 50\text{ mA}$	–	0.5	V
V_{BEsat}	base-emitter saturation voltage	$I_C = 150\text{ mA}; I_B = 15\text{ mA}$	–	1.1	V
C_{ob}	collector capacitance	$I_E = I_C = 0; V_{CB} = 10\text{ V}; f = 1\text{ MHz}$	–	12	pF
C_{ib}	emitter capacitance	$I_C = I_E = 0; V_{BE} = 500\text{ mV}; f = 1\text{ MHz}$	–	60	pF
f_T	transition frequency	$I_C = 50\text{ mA}; V_{CE} = 10\text{ V}; f = 1.0\text{ MHz}$	100	–	MHz
F	noise figure	$I_C = 100\text{ }\mu\text{A}; V_{CE} = 10\text{ V}; R_S = 1\text{ k}\Omega; f = 1.0\text{ kHz}$	–	4.0	dB



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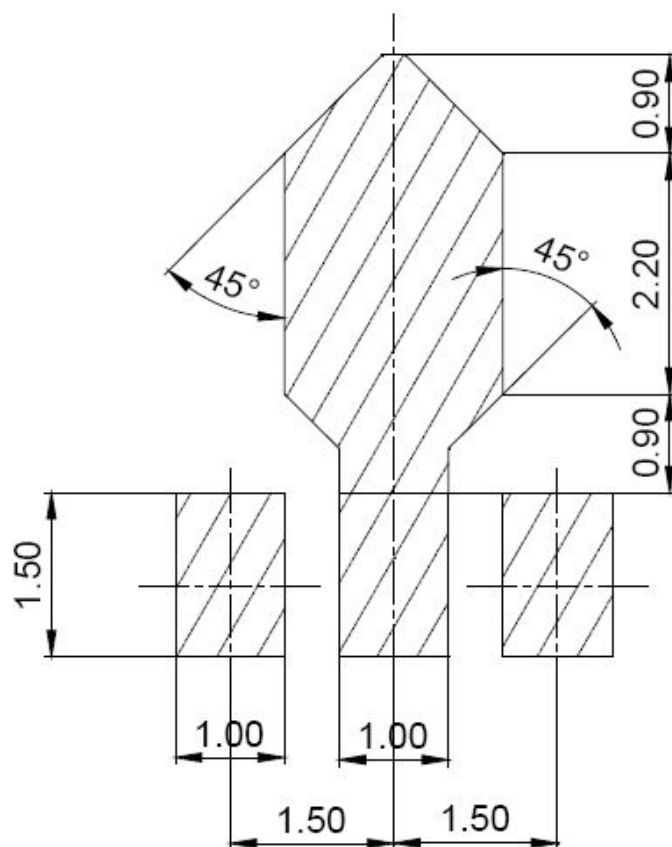
SURFACE MOUNT

RECOMMENDED FOOT PRINT

all dimensions in mm

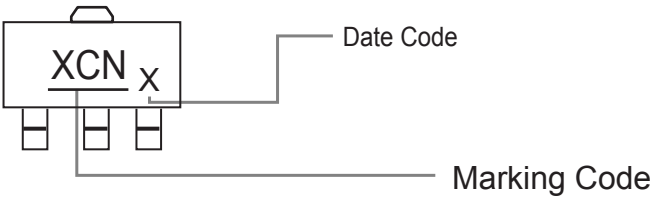
SC-62/SOT-89

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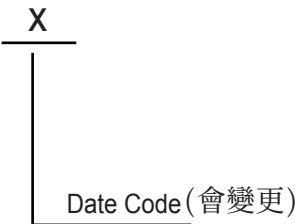
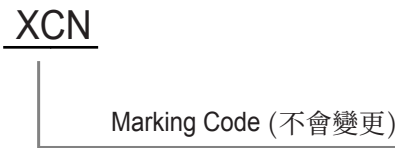


The Marking and Part No. for CHTNAHXGP-A

Marking:



Part No.:



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. :