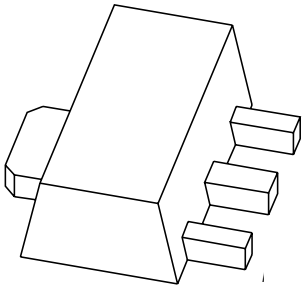
DATA SHEET



PXTA92
PNP high-voltage transistor

Product data sheet
Supersedes data of 1999 Apr 29

2004 Dec 09

PNP high-voltage transistor PXTA92

FEATURES

- Low current (max. 100 mA)
- High voltage (max. 300 V).

APPLICATIONS

- Telephony and professional communication equipment.

DESCRIPTION

PNP high-voltage transistor in a SOT89 plastic package.
NPN complement: PXTA42.

MARKING

TYPE NUMBER	MARKING CODE(1)
PXTA92	*1N

Note

1. * = p: Made in Hong Kong.
   * = t: Made in Malaysia.
   * = W: Made in China.

PINNING

PIN	DESCRIPTION
1	emitter
2	collector
3	base

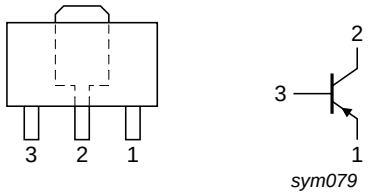


Fig.1 Simplified outline (SOT89) and symbol.

ORDERING INFORMATION

TYPE NUMBER	PACKAGE		
	NAME	DESCRIPTION	VERSION
PXTA92	SC-62	plastic surface mounted package; collector pad for good heat transfer; 3 leads	SOT89

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	–	−300	V
V_{CEO}	collector-emitter voltage	open base	–	−300	V
V_{EBO}	emitter-base voltage	open collector	–	−5	V
I_C	collector current (DC)		–	−100	mA
I_{CM}	peak collector current		–	−200	mA
I_{BM}	peak base current		–	−100	mA
P_{tot}	total power dissipation	$T_{amb} \leq 25$ °C; note 1	–	1.3	W
T_{stg}	storage temperature		−65	+150	°C
T_j	junction temperature		–	150	°C
T_{amb}	ambient temperature		−65	+150	°C

Note

1. Device mounted on a printed-circuit board, single-sided copper, tin-plated, mounting pad for collector 6 cm^2.
   For other mounting conditions, see *"Thermal considerations for SOT89 in the General Part of associated Handbook".*

THERMAL CHARACTERISTICS

SYMBOL	PARAMETER	CONDITIONS	VALUE	UNIT
$R_{th(j-a)}$	thermal resistance from junction to ambient	note 1	96	K/W
$R_{th(j-s)}$	thermal resistance from junction to soldering point		16	K/W

Note

1. Device mounted on a printed-circuit board, single-sided copper, tin-plated, mounting pad for collector 6 cm^2. For other mounting conditions, see *"Thermal considerations for SOT89 in the General Part of associated Handbook".*

CHARACTERISTICS

T_{amb} = 25 °C unless otherwise specified.

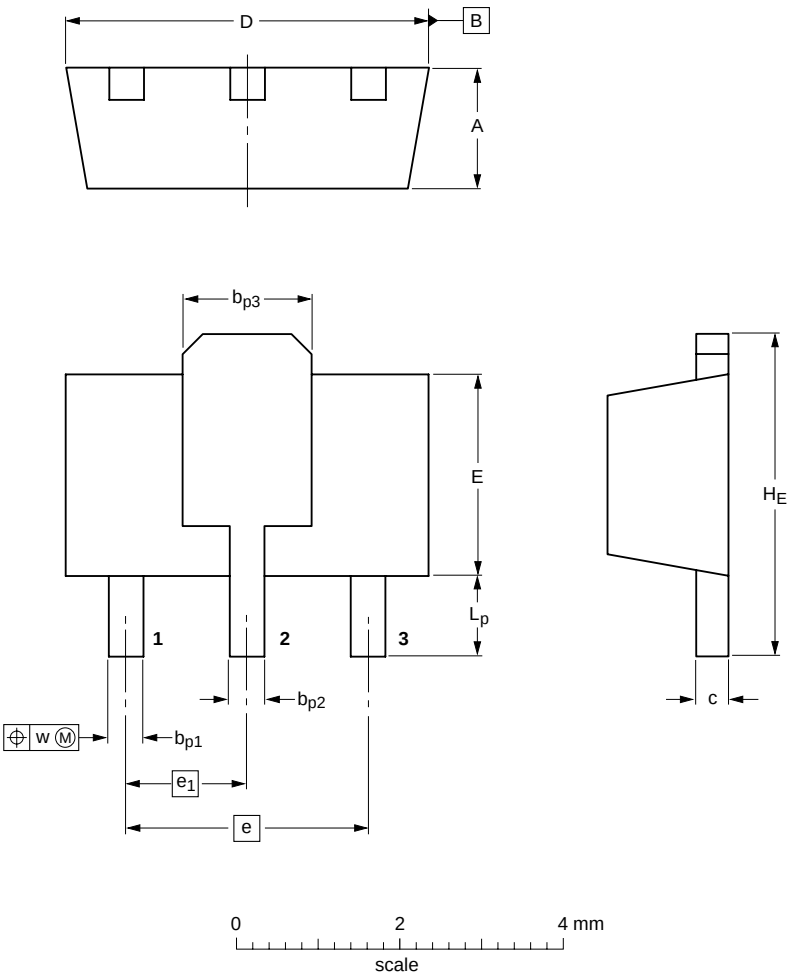
SYMBOL	PARAMETER	CONDITIONS	MIN.	MAX.	UNIT
I_{CBO}	collector-base cut-off current	I_E = 0 A; V_{CB} = −200 V	−	−250	nA
I_{EBO}	emitter-base cut-off current	I_C = 0 A; V_{BE} = −3 V	−	−100	nA
h_{FE}	DC current gain	V_{CE} = −10 V; note 1			
		I_C = −1 mA	25	−	
		I_C = −10 mA	40	−	
		I_C = −30 mA	25	−	
V_{CEsat}	collector-emitter saturation voltage	I_C = −20 mA; I_B = −2 mA	−	−500	mV
V_{BEsat}	base-emitter saturation voltage	I_C = −20 mA; I_B = −2 mA		−900	mV
C_c	collector capacitance	$I_E = i_e$ = 0 A; V_{CB} = −20 V; f = 1 MHz	−	6	pF
f_T	transition frequency	I_C = −10 mA; V_{CE} = −20 V; f = 100 MHz	50	−	MHz

Note

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

PACKAGE OUTLINE

Plastic surface-mounted package; collector pad for good heat transfer; 3 leads **SOT89**



DIMENSIONS (mm are the original dimensions)

UNIT	A	b_{p1}	b_{p2}	b_{p3}	c	D	E	e	e_1	H_E	L_p	w
mm	1.6 1.4	0.48 0.35	0.53 0.40	1.8 1.4	0.44 0.23	4.6 4.4	2.6 2.4	3.0	1.5	4.25 3.75	1.2 0.8	0.13

OUTLINE VERSION	REFERENCES				EUROPEAN PROJECTION	ISSUE DATE
	IEC	JEDEC	JEITA			
SOT89		TO-243	SC-62			~~04-08-03~~ 06-03-16

DATA SHEET STATUS

DOCUMENT STATUS[1]	PRODUCT STATUS[2]	DEFINITION
Objective data sheet	Development	This document contains data from the objective specification for product development.
Preliminary data sheet	Qualification	This document contains data from the preliminary specification.
Product data sheet	Production	This document contains the product specification.

Notes

1. Please consult the most recently issued document before initiating or completing a design.
2. The product status of device(s) described in this document may have changed since this document was published and may differ in case of multiple devices. The latest product status information is available on the Internet at URL http://www.nxp.com.

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Customer notification

This data sheet was changed to reflect the new company name NXP Semiconductors, including new legal definitions and disclaimers. No changes were made to the technical content, except for package outline drawings which were updated to the latest version.

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