



## SMALL SIGNAL PNP TRANSISTOR

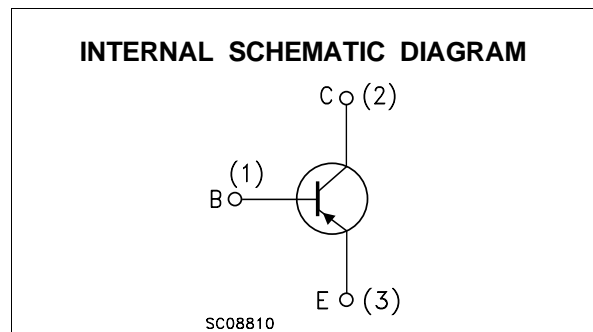
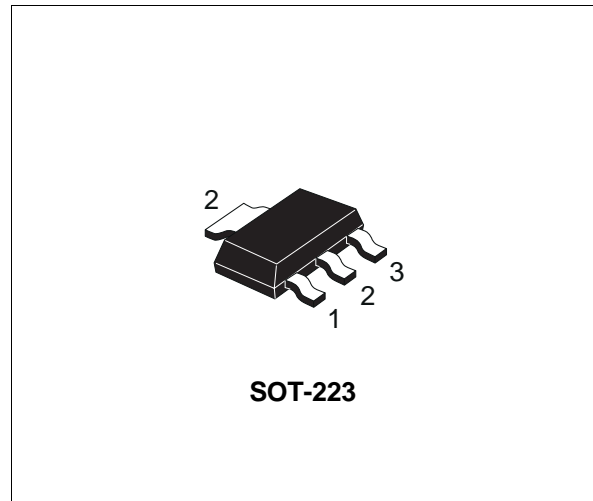
PRELIMINARY DATA

Type	Marking
STZTA92	ZTA92

- SILICON EPITAXIAL PLANAR PNP HIGH VOLTAGE TRANSISTOR
- SOT-223 PLASTIC PACKAGE FOR SURFACE MOUNTING CIRCUITS
- TAPE AND REEL PACKING
- THE NPN COMPLEMENTARY TYPE IS STZTA42

### APPLICATIONS

- VIDEO AMPLIFIER CIRCUITS (RGB CATHODE CURRENT CONTROL)
- TELEPHONE WIRELINE INTERFACE (HOOK SWITCHES, DIALER CIRCUITS)



### ABSOLUTE MAXIMUM RATINGS

Symbol	Parameter	Value	Unit
$V_{CBO}$	Collector-Base Voltage ( $I_E = 0$ )	-300	V
$V_{CEO}$	Collector-Emitter Voltage ( $I_B = 0$ )	-300	V
$V_{EBO}$	Emitter-Base Voltage ( $I_C = 0$ )	-5	V
$I_C$	Collector Current	-0.5	A
$I_{CM}$	Collector Peak Current	-0.6	A
$P_{tot}$	Total Dissipation at $T_C = 25\text{ }^\circ\text{C}$	1.5	W
$T_{stg}$	Storage Temperature	-65 to 150	$^\circ\text{C}$
$T_j$	Max. Operating Junction Temperature	150	$^\circ\text{C}$

## STZTA92

### THERMAL DATA

$R_{thj-amb}$ •	Thermal Resistance Junction-Ambient	Max	83.3	°C/W
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• Device mounted on a PCB area of 1 cm<sup>2</sup>

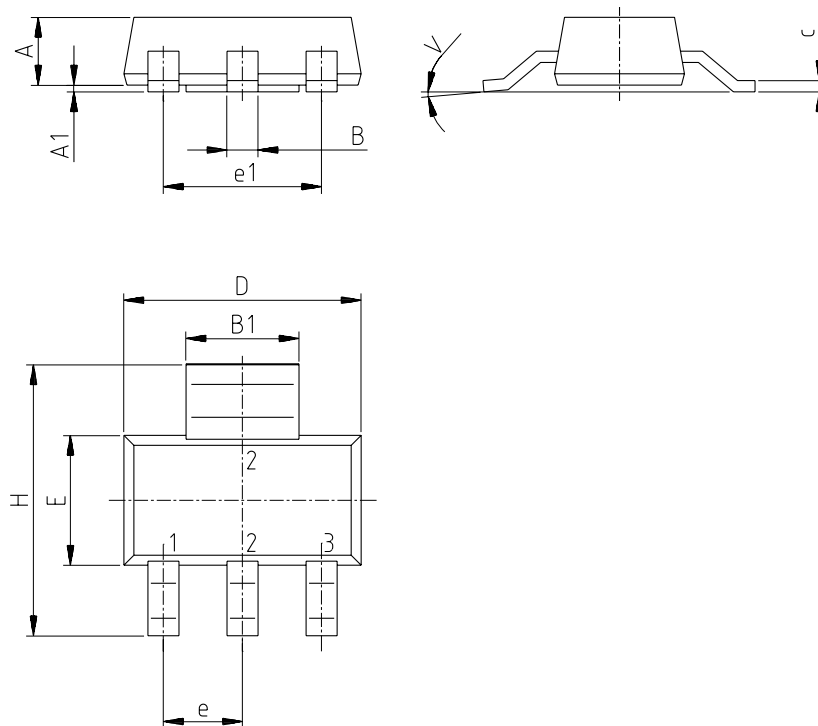
### ELECTRICAL CHARACTERISTICS (T<sub>case</sub> = 25 °C unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I <sub>CBO</sub>	Collector Cut-off Current (I <sub>E</sub> = 0)	V <sub>CB</sub> = -200 V			-100	nA
V <sub>(BR)CBO</sub>	Collector-Base Breakdown Voltage (I <sub>E</sub> = 0)	I <sub>C</sub> = -100 μA	-300			V
V <sub>(BR)CEO*</sub>	Collector-Emitter Breakdown Voltage (I <sub>B</sub> = 0)	I <sub>C</sub> = -1 mA	-300			V
V <sub>(BR)EBO</sub>	Emitter-Base Breakdown Voltage (I <sub>C</sub> = 0)	I <sub>E</sub> = -100 μA	-5			V
V <sub>CE(sat)*</sub>	Collector-Emitter Saturation Voltage	I <sub>C</sub> = -20 mA I <sub>B</sub> = -2 mA			-0.5	V
V <sub>BE(sat)*</sub>	Base-Emitter Saturation Voltage	I <sub>C</sub> = -20 mA I <sub>B</sub> = -2 mA			-0.9	V
h <sub>FE*</sub>	DC Current Gain	I <sub>C</sub> = -1 mA V <sub>CE</sub> = -10 V I <sub>C</sub> = -10 mA V <sub>CE</sub> = -10 V I <sub>C</sub> = -30 mA V <sub>CE</sub> = -10 V	25 40 40			
f <sub>T</sub>	Transition Frequency	I <sub>C</sub> = -10mA V <sub>CE</sub> = -20 V f = 50 MHz	50			MHz
C <sub>CEO</sub>	Collector-Emitter Capacitance	V <sub>CE</sub> = -20 V f = 1 MHz	50			pF

\* Pulsed: Pulse duration = 300 μs, duty cycle ≤ 1.5 %

## SOT-223 MECHANICAL DATA

DIM.	mm			inch		
	MIN.	TYP.	MAX.	MIN.	TYP.	MAX.
A			1.80			0.071
B	0.60	0.70	0.80	0.024	0.027	0.031
B1	2.90	3.00	3.10	0.114	0.118	0.122
c	0.24	0.26	0.32	0.009	0.010	0.013
D	6.30	6.50	6.70	0.248	0.256	0.264
e		2.30			0.090	
e1		4.60			0.181	
E	3.30	3.50	3.70	0.130	0.138	0.146
H	6.70	7.00	7.30	0.264	0.276	0.287
V			10°			10°
A1		0.02				



P008B

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