



STZTA92

SMALL SIGNAL PNP TRANSISTOR

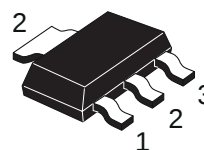
PRELIMINARY DATA

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

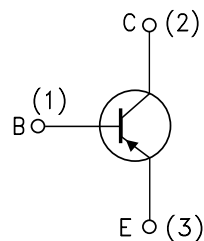
APPLICATIONS

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



SOT-223

INTERNAL SCHEMATIC DIAGRAM



SC08810

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	$^{\circ}\text{C}$

THERMAL DATA

$R_{thj-amb}$ •	Thermal Resistance Junction-Ambient	Max	83.3	$^{\circ}\text{C/W}$
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• Device mounted on a PCB area of 1 cm^2

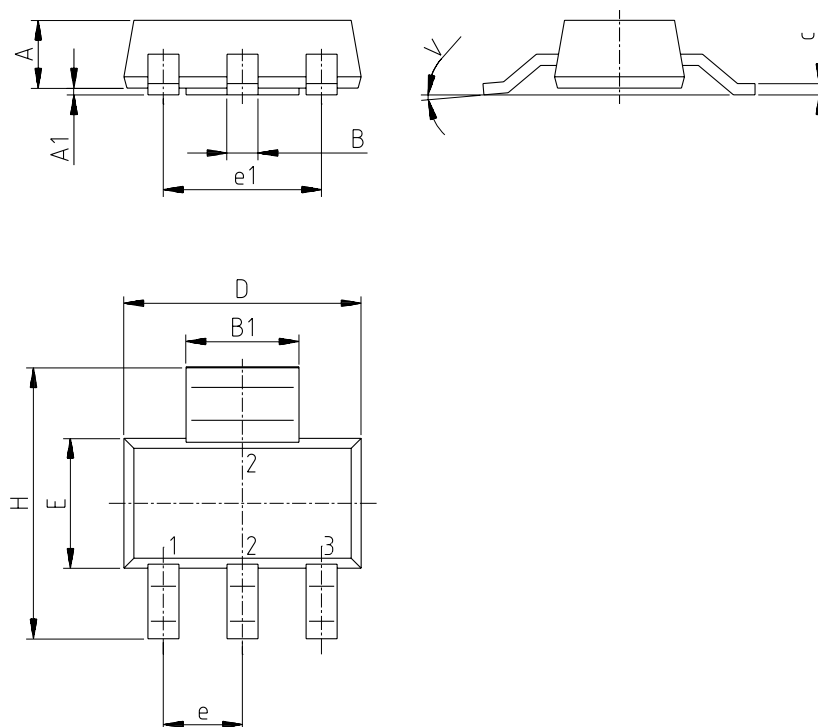
ELECTRICAL CHARACTERISTICS ($T_{case} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)

Symbol	Parameter	Test Conditions	Min.	Typ.	Max.	Unit
I_{CBO}	Collector Cut-off Current ($I_E = 0$)	$V_{CB} = -200\text{ V}$			-100	nA
$V_{(BR)CBO}$	Collector-Base Breakdown Voltage ($I_E = 0$)	$I_C = -100\text{ }\mu\text{A}$	-300			V
$V_{(BR)CEO}^*$	Collector-Emitter Breakdown Voltage ($I_B = 0$)	$I_C = -1\text{ mA}$	-300			V
$V_{(BR)EBO}$	Emitter-Base Breakdown Voltage ($I_C = 0$)	$I_E = -100\text{ }\mu\text{A}$	-5			V
$V_{CE(sat)}^*$	Collector-Emitter Saturation Voltage	$I_C = -20\text{ mA}$ $I_B = -2\text{ mA}$			-0.5	V
$V_{BE(sat)}^*$	Base-Emitter Saturation Voltage	$I_C = -20\text{ mA}$ $I_B = -2\text{ mA}$			-0.9	V
h_{FE}^*	DC Current Gain	$I_C = -1\text{ mA}$ $V_{CE} = -10\text{ V}$ $I_C = -10\text{ mA}$ $V_{CE} = -10\text{ V}$ $I_C = -30\text{ mA}$ $V_{CE} = -10\text{ V}$	25 40 40			
f_T	Transition Frequency	$I_C = -10\text{ mA}$ $V_{CE} = -20\text{ V}$ $f = 50\text{ MHz}$	50			MHz
C_{CEO}	Collector-Emitter Capacitance	$V_{CE} = -20\text{ V}$ $f = 1\text{ MHz}$	50			pF

* Pulsed: Pulse duration = $300\text{ }\mu\text{s}$, duty cycle $\leq 1.5\%$

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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