



PZTA92/93

PNP SILICON TRANSISTOR

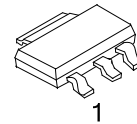
HIGH VOLTAGE TRANSISTOR

DESCRIPTION

The UTC **PZTA92/93** are high voltage PNP transistors, designed for telephone signal switching and for high voltage amplifier.

FEATURES

- * Collector-emitter voltage: $V_{CE0}=-300V$ (UTC PZTA92)
 $V_{CE0}=-200V$ (UTC PZTA93)
- * Complement to UTC PZTA42/43
- * Collector power dissipation: $P_{C(MAX)}=1W$



SOT-223

ORDERING INFORMATION

Ordering Number	Package	Pin Assignment			Packing
		1	2	3	
PZTA92G-AA3-R	SOT-223	B	C	E	Tape Reel
PZTA93G-AA3-R	SOT-223	B	C	E	Tape Reel

<p>PZTA92G-AA3-R</p> <p>(1) Packing Type (2) Package Type (3) Green Package</p>	<p>(1) R: Tape Reel (2) AA3: SOT-223 (3) G: Halogen Free and Lead Free</p>
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MARKING

PZTA92	PZTA93

■ ABSOLUTE MAXIMUM RATING ($T_A=25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	PZTA92	-300	V
	PZTA93	-200	V
Collector-Emitter Voltage	PZTA92	-300	V
	PZTA93	-200	V
Emitter-Base Voltage	V_{EBO}	-5	V
Collector Current	I_C	-500	mA
Collector Power Dissipation	P_C	1	W
Junction Temperature	T_J	150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-55 ~ +150	$^\circ\text{C}$

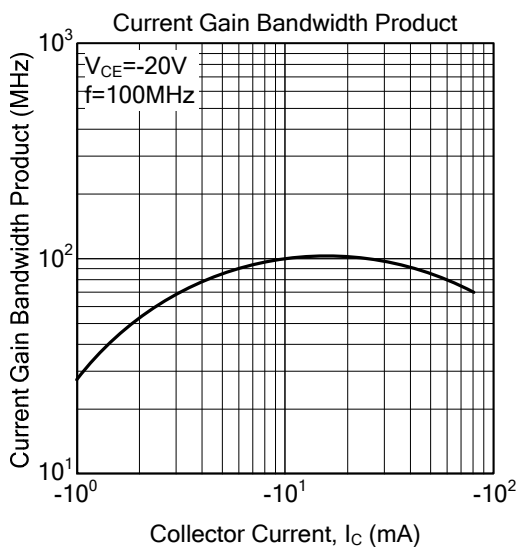
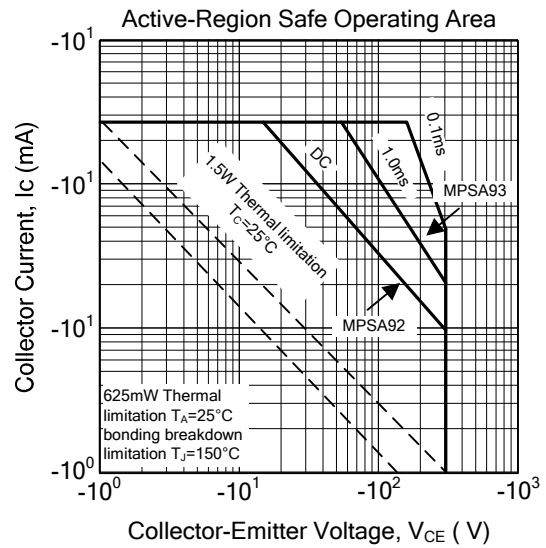
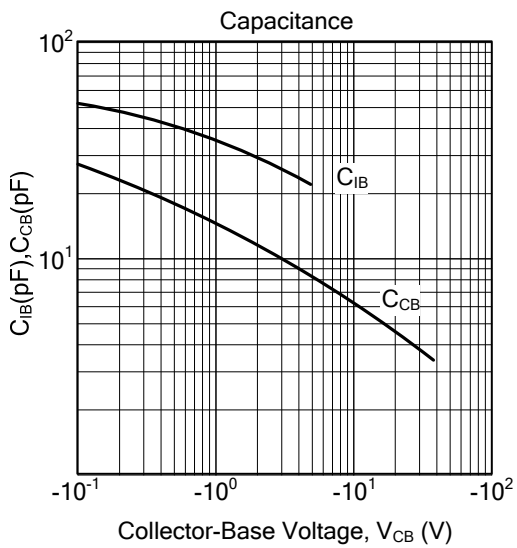
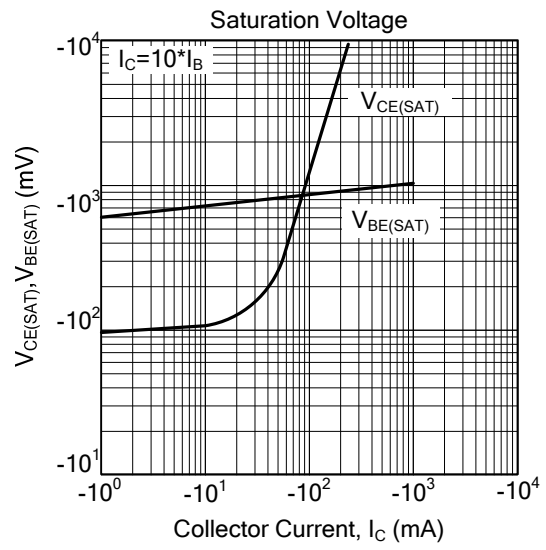
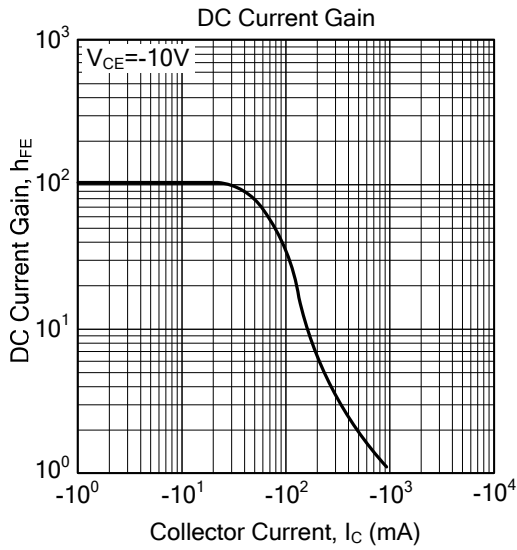
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C=-100\mu\text{A}, I_E=0$	PZTA92	-300		V
			PZTA93	-200		V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=-1\text{mA}, I_B=0$	PZTA92	-300		V
			PZTA93	-200		V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E=-100\mu\text{A}, I_C=0$	-5			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=-200\text{V}, I_E=0$	PZTA92		-0.25	μA
		$V_{CB}=-160\text{V}, I_E=0$	PZTA93		-0.25	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=-3\text{V}, I_C=0$			-0.10	μA
DC Current Gain (Note)	h_{FE}	$V_{CE}=-10\text{V}, I_C=-1\text{mA}$	60			
		$V_{CE}=-10\text{V}, I_C=-10\text{mA}$	80			
		$V_{CE}=-10\text{V}, I_C=-30\text{mA}$	80			
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C=-20\text{mA}, I_B=-2\text{mA}$			-0.5	V
Base-Emitter Saturation Voltage	$V_{BE(SAT)}$	$I_C=-20\text{mA}, I_B=-2\text{mA}$			-0.90	V
Current Gain Bandwidth Product	f_T	$V_{CE}=-20\text{V}, I_C=-10\text{mA}, f=100\text{MHz}$	50			MHz
Collector Base Capacitance	C_{CB}	$V_{CB}=-20\text{V}, I_E=0, f=1\text{MHz}$	PZTA92		6	pF
			PZTA93		8	pF

Note: Pulse test: $P_W < 300\mu\text{s}$, Duty Cycle $< 2\%$, $V_{CE(SAT)} < 200\text{mV}$ (Class SIN)

TYPICAL CHARACTERISTICS



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