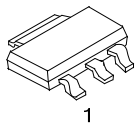
PZTA92/93

PNP SILICON TRANSISTOR

HIGH VOLTAGE TRANSISTOR



SOT-223

Lead-free: PZTA92L / PZTA93L
Halogen-free:PZTA92G / PZTA93G

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

■ ORDERING INFORMATION

Ordering Number			Package	Pin Assignment			Packing
Normal	Lead Free	Halogen Free		1	2	3	
PZTA92-AA3-R	PZTA92L-AA3-R	PZTA92G-AA3-R	SOT-223	B	C	E	Tape Reel
PZTA93-AA3-R	PZTA93L-AA3-R	PZTA93G-AA3-R	SOT-223	B	C	E	Tape Reel

PZTA92L-AA3-R
(1)Packing Type
(2)Package Type
(3)Lead Plating

(1) R: Tape Reel
(2) AA3: SOT-223
(3) G: Halogen Free, L: Lead Free, Blank: Pb/Sn

■ ABSOLUTE MAXIMUM RATING (Ta=25°C)

PARAMETER		SYMBOL	RATINGS	UNIT
Collector-Base Voltage	PZTA92	V_{CBO}	-300	V
	PZTA93		-200	V
Collector-Emitter Voltage	PZTA92	V_{CEO}	-300	V
	PZTA93		-200	V
Emitter-Base Voltage		V_{EBO}	-5	V
Collector Current		I_C	-500	mA
Collector Power Dissipation		Pc	1	W
Junction Temperature		T_J	150	°C
Storage Temperature		T_{STG}	-55 ~ +150	°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 (Ta=25°C, unless otherwise specified)

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

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

■ TYPICAL CHARACTERISTICS