



## PZTA14

### NPN SILICON TRANSISTOR

## DARLINGTON TRANSISTOR

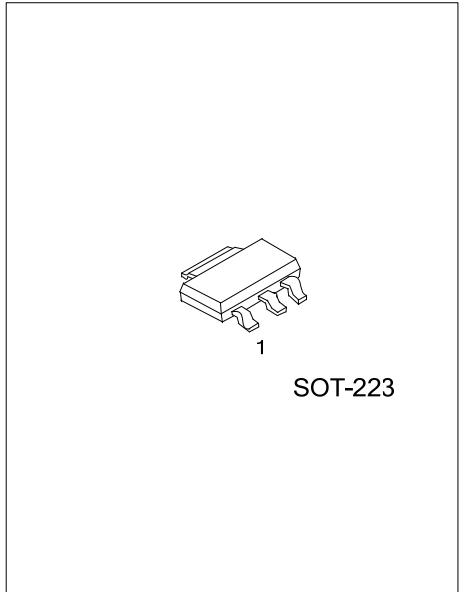
### DESCRIPTION

The UTC **PZTA14** is a Darlington transistor.

### FEATURES

\* Collector-Emitter Voltage:  $V_{CES} = 30V$

\* Collector Power Dissipation:  $P_{C(MAX)} = 1W$



### ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
PZTA14L-AA3-R	PZTA14G-AA3-R	SOT-223	B	C	E	Tape Reel

<p>PZTA14L-AA3-R</p> <p>(1) Packing Type (2) Package Type (3) Lead Free</p>	<p>(1) R: Tape Reel (2) AA3: SOT-223 (3) G: Halogen Free, L: Lead Free</p>
---	--

■ ABSOLUTE MAXIMUM RATING (T<sub>A</sub>=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V <sub>CBO</sub>	30	V
Collector-Emitter Voltage	V <sub>CES</sub>	30	V
Emitter-Base Voltage	V <sub>EBO</sub>	10	V
Collector Power Dissipation	P <sub>C</sub>	1	W
Collector Current	I <sub>C</sub>	500	mA
Junction Temperature	T <sub>J</sub>	150	°C
Storage Temperature	T <sub>STG</sub>	-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 (T<sub>A</sub> =25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	BV <sub>CES</sub>	I <sub>C</sub> =100μA, I <sub>B</sub> =0	30			V
Collector Cut-Off Current	I <sub>CBO</sub>	V <sub>CB</sub> =30V, I <sub>E</sub> =0			100	nA
Emitter Cut-Off Current	I <sub>EBO</sub>	V <sub>EB</sub> =10V, I <sub>C</sub> =0			100	nA
DC Current Gain	h <sub>FE</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =100mA	20000			
Collector-Emitter Saturation Voltage	V <sub>CE(SAT)</sub>	I <sub>C</sub> =100mA, I <sub>B</sub> =0.1mA			1.5	V
Base-Emitter on Voltage	V <sub>BE(ON)</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =100mA			2.0	V
Current Gain Bandwidth Product	f <sub>T</sub>	V <sub>CE</sub> =5V, I <sub>C</sub> =10mA, f=100MHz	125			MHz

Pulse test: Pulse Width < 300μs, Duty Cycle=2%

UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.