



## PZTA14

## NPN SILICON TRANSISTOR

### DARLINGTON TRANSISTOR

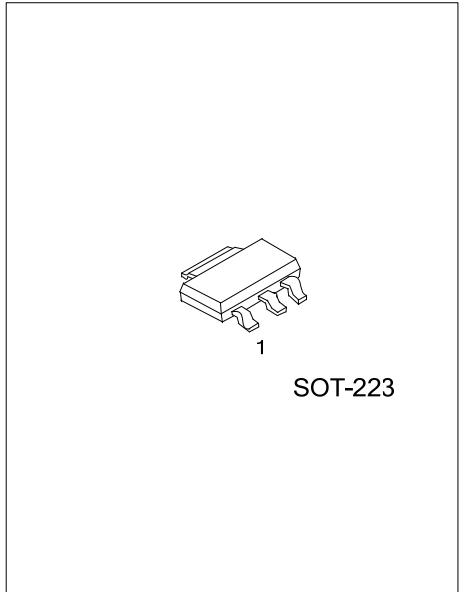
#### DESCRIPTION

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>
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■ 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%

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