

# UTC UNISONIC TECHNOLOGIES CO., LTD

# PZTA14

# NPN SILICON TRANSISTOR

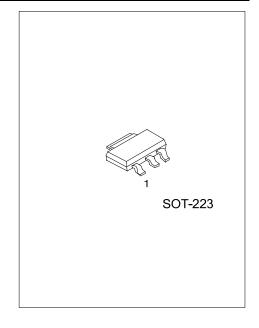
# **DARLINGTON TRANSISTOR**

#### **DESCRIPTION**

The UTC PZTA14 is a Darlington transistor.

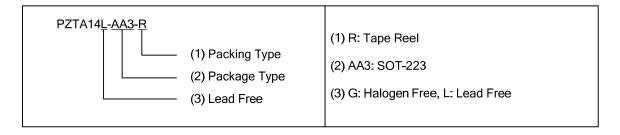
#### **FEATURES**

\* Collector-Emitter Voltage: V<sub>CES</sub> = 30V \* Collector Power Dissipation: P<sub>C(MAX)</sub> = 1W



## **ORDERING INFORMATION**

Ordering Number		Darling	Pin Assignment			Dankina	
Lead Free	Halogen Free	Package	1	2	3	Packing	
PZTA14L-AA3-R	PZTA14G-AA3-R	SOT-223	В	С	Е	Tape Reel	



www.unisonic.com.tw 1 of 2 QW-R207-004, D

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

PARAMETER SYMBOL		RATINGS	UNIT
FARAIVIETER	STIVIDUL	RATINGS	UNIT
Collector-Base Voltage	$V_{CBO}$	30	V
Collector-Emitter Voltage	V <sub>CES</sub>	30	V
Emitter-Base Voltage	$V_{EBO}$	10	V
Collector Power Dissipation	Pc	1	W
Collector Current	Ic	500	mA
Junction Temperature	$T_J$	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>	$V_{CB}$ =30 $V$ , $I_E$ =0			100	nA
Emitter Cut-Off Current	I <sub>EBO</sub>	$V_{EB}$ =10V, $I_{C}$ =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	$V_{BE(ON)}$	V <sub>CE</sub> =5V, I <sub>C</sub> =100mA			2.0	V
Current Gain Bandwidth Product	f⊤	$V_{CE}$ =5V, $I_{C}$ =10mA, f=100MHz	125			MHz

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

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