# UNISONIC TECHNOLOGIES CO., LTD

## UG3K

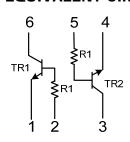
### NPN SILICON TRANSISTOR

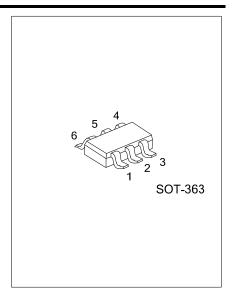
# **GENERAL PURPOSE (DUAL DIGITAL TRANSISTORS)**

#### **FEATURES**

\* Two DTC143T chips in a SOT-363 package.

#### **EQUIVALENT CIRCUIT**

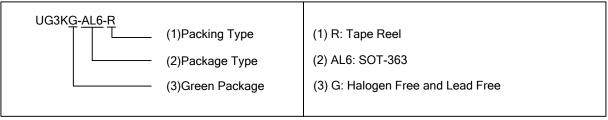




#### **ORDERING INFORMATION**

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Ord	dering Number		1	2	3	4	5	6	Packing
U	G3KL-AL6-R	SOT-363	E1	B1	C2	E2	B2	C1	Tape Reel

Note: Pin Assignment: B: Base C: Collector E: Emitter



#### **MARKING**



#### ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C, unless otherwise specified) (Note2)

PARAMETER	SYMBOL	RATINGS	UNIT	
Collector-Base Voltage	$V_{CBO}$	50	V	
Collector-Emitter Voltage	$V_{CEO}$	50	<b>V</b>	
Emitter-Base Voltage	$V_{EBO}$	5	<b>V</b>	
Collector Current	Ic	100	mA	
Total Power Dissipation(120mW per element must not be exceeded)	$P_D$	150	mW	
Junction Temperature	TJ	+150	°C	
Storage Temperature	T <sub>STG</sub>	-55 ~ +150	٧	

Notes: 1. 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) (Note2)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	$BV_CBO$	I <sub>C</sub> =50μA	50			V
Collector-Emitter Breakdown Voltage	BV <sub>CEO</sub>	I <sub>C</sub> =1mA	50			V
Emitter-Base Breakdown Voltage	BV <sub>EBO</sub>	I <sub>E</sub> =50μA	5			V
Collector Cutoff Current	I <sub>CBO</sub>	V <sub>CB</sub> =50V			0.5	μΑ
Emitter Cutoff Current	I <sub>EBO</sub>	V <sub>EB</sub> =4V			0.5	μΑ
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_{\rm C}/I_{\rm B}$ =5mA/0.25mA			0.3	V
DC Current Transfer Ratio	h <sub>FE</sub>	V <sub>CE</sub> /I <sub>C</sub> =5V/1mA	100	250	600	
Input Resistance	R <sub>1</sub>		3.29	4.7	6.11	ΚΩ

<sup>2.</sup> The Following Characteristics Apply to Both TR1 and TR2.

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