# UNISONIC TECHNOLOGIES CO., LTD

# UG3K

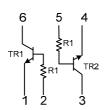
# **NPN SILICON TRANSISTOR**

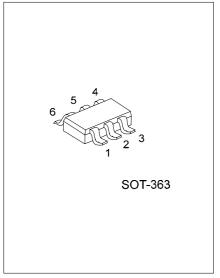
# **GENERAL PURPOSE (DUAL DIGITAL TRANSISTORS)**

#### **FEATURES**

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

## **EQUIVALENT CIRCUIT**

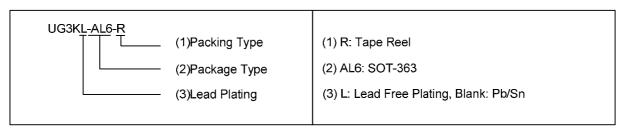




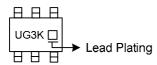
\*Pb-free plating product number: UG3KL

#### **ORDERING INFORMATION**

Ordering Number		Daalaasa	Pin Assignment					Daakina	
Normal	Lead Free Plating	Package	1	2	3	4	5	6	Packing
UG3K-AL6-R	UG3KL-AL6-R	SOT-363	E1	B1	C2	E2	B2	C1	Tape Reel



#### **MARKING**



QW-R218-003.A

## The Following Characteristics Apply to Both TR1 and TR2.

## ■ ABSOLUTE MAXIMUM RATINGS (Ta=25 )

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

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 )

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV <sub>CBO</sub>	I <sub>C</sub> =50μA	50			٧
Collector-Emitter Breakdown Voltage	BV <sub>CEO</sub>	I <sub>C</sub> =1mA	50			٧
Emitter-Base Breakdown Voltage	$BV_{EBO}$	I <sub>E</sub> =50μA	5			٧
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	٧
DC Current Transfer Ratio	h <sub>FE</sub>	$V_{CE}/I_{C}=5V/1mA$	100	250	600	
Input Resistance	R <sub>1</sub>		3.29	4.7	6.11	ΚΩ

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