



## UG3K

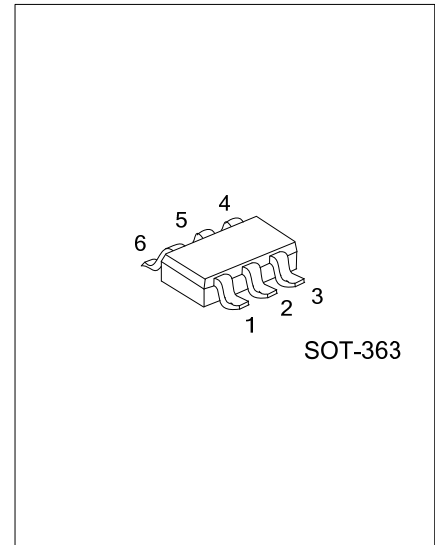
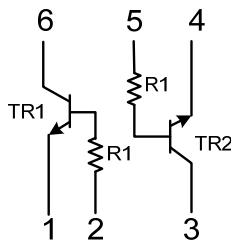
## NPN SILICON TRANSISTOR

### GENERAL PURPOSE (DUAL DIGITAL TRANSISTORS)

#### FEATURES

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

#### EQUIVALENT CIRCUIT



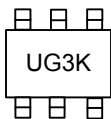
#### ORDERING INFORMATION

Ordering Number	Package	Pin Assignment						Packing
		1	2	3	4	5	6	
UG3KL-AL6-R	SOT-363	E1	B1	C2	E2	B2	C1	Tape Reel

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

UG3KG-AL6-R	(1)Packing Type (2)Package Type (3)Green Package	(1) R: Tape Reel (2) AL6: SOT-363 (3) G: Halogen Free and Lead Free
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#### MARKING



ABSOLUTE MAXIMUM RATINGS ( $T_A=25^{\circ}\text{C}$ , unless otherwise specified) (Note2)

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	$I_C$	100	mA
Total Power Dissipation (120mW per element must not be exceeded)	$P_D$	150	mW
Junction Temperature	$T_J$	+150	$^{\circ}\text{C}$
Storage Temperature	$T_{STG}$	-55 ~ +150	v

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.

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

■ ELECTRICAL CHARACTERISTICS ( $T_A=25^{\circ}\text{C}$ , unless otherwise specified) (Note2)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	$BV_{CBO}$	$I_C=50\mu\text{A}$	50			V
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_C=1\text{mA}$	50			V
Emitter-Base Breakdown Voltage	$BV_{EBO}$	$I_E=50\mu\text{A}$	5			V
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=50\text{V}$			0.5	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=4\text{V}$			0.5	$\mu\text{A}$
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C/I_B=5\text{mA}/0.25\text{mA}$			0.3	V
DC Current Transfer Ratio	$h_{FE}$	$V_{CE}/I_C=5\text{V}/1\text{mA}$	100	250	600	
Input Resistance	$R_1$		3.29	4.7	6.11	$\text{K}\Omega$

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