



# UG4J

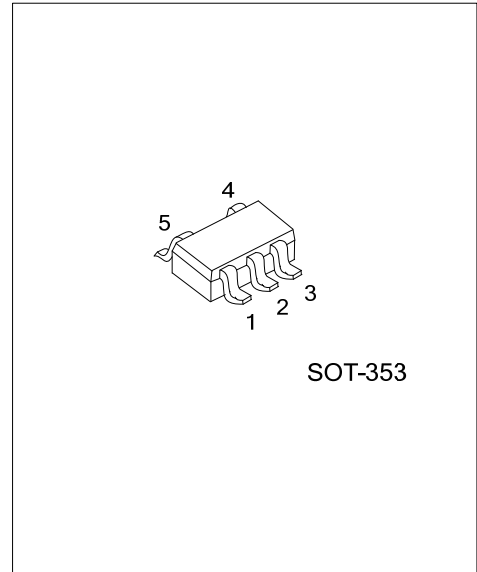
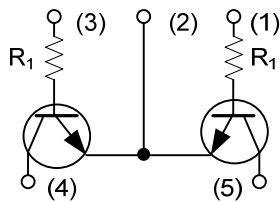
## NPN SILICON TRANSISTOR

### EMITTER COMMON (DUAL DIGITAL TRANSISTORS)

#### FEATURES

\* Two DTC114T chips in a SOT-353 package.

#### EQUIVALENT CIRCUIT



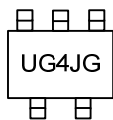
#### ORDERING INFORMATION

Order Number	Package	Pin Assignment					Packing
		1	2	3	4	5	
UG4JG-AL5-R	SOT-353	B1	E1,E2	B2	C2	C1	Tape Reel

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

<p>UG4JG-AL5-R</p> <p>(1) Packing Type (2) Package Type (3) Green Package</p>	<p>(1) R: Tape Reel (2) AL5: SOT-353 (3) G: Halogen Free and Lead Free</p>
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#### MARKING



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

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	$P_D$	150(Note1)	mW
Junction Temperature	$T_J$	+150	$^{\circ}\text{C}$
Storage Temperature	$T_{STG}$	-40 ~ +150	$^{\circ}\text{C}$

Note 1. \*120mW per element must not be exceeded.

2. 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 ( $T_A=25^{\circ}\text{C}$ , unless otherwise specified)

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	$BV_{EBO}$	$I_E=1\text{mA}$	5			V
Current 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	$V_{CE(SAT)}$	$I_C/I_B=10\text{mA}/1\text{mA}$			0.3	V
DC Current Transfer Ratio	$h_{FE}$	$V_{CE}=5\text{V}, I_C=1\text{mA}$	100	250	600	
Transition Frequency	$f_T$	$V_{CE}=10\text{V}, I_E=-5\text{mA}, f=100\text{MHz}^*$		250		MHz
Input Resistance	$R_1$		7	10	13	K $\Omega$

Note: \* Transition frequency of the device.

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