



UNISONIC TECHNOLOGIES CO., LTD

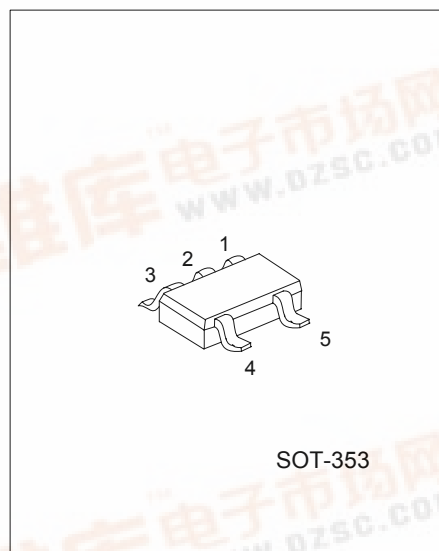
UG4J

NPN EPITAXIAL SILICON TRANSISTOR

EMITTER COMMON (DUAL DIGITAL TRANSISTORS)

FEATURES

* Two DTC114T chips in a SOT-353 package.



SOT-353

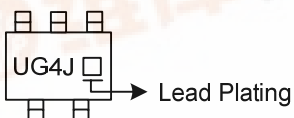
*Pb-free plating product number: UG4JL

ORDERING INFORMATION

Order Number		Package	Pin Assignment					Packing
Normal	Lead Free Plating		1	2	3	4	5	
UG4J-AL5-0-R	UG4JL-AL5-0-R	SOT-353	B1	E1,E2	B2	C2	C1	Tape Reel

<p>UG4JL-AL5-0-R</p>		<p>(1) R: Tape Reel (2) refer to Pin Assignment (3) AL5: SOT-353 (4) L: Lead Free Plating, Blank: Pb/Sn</p>
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MARKING INFORMATION



■ ABSOLUTE MAXIMUM RATING (Ta=25°C)

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	°C
Storage Temperature	T_{STG}	-40 ~ +150	°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.

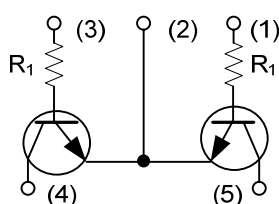
Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS (Ta=25°C)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C=50\mu A$	50			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=1mA$	50			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E=1mA$	5			V
Current Cutoff Current	I_{CBO}	$V_{CB}=50V$			0.5	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=4V$			0.5	μA
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C/I_B=10mA/1mA$			0.3	V
DC Current Transfer Ratio	h_{FE}	$V_{CE}=5V, I_C=1mA$	100	250	600	
Transition Frequency	f_T	$V_{CE}=10V, I_E=-5mA, f=100MHz^*$		250		MHz
Input Resistance	R_1		7	10	13	K Ω

Note * Transition frequency of the device.

■ EQUIVALENT CIRCUIT



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