



UG9K

DUAL TRANSISTOR

COMPOUND TRANSISTORS

UG9K

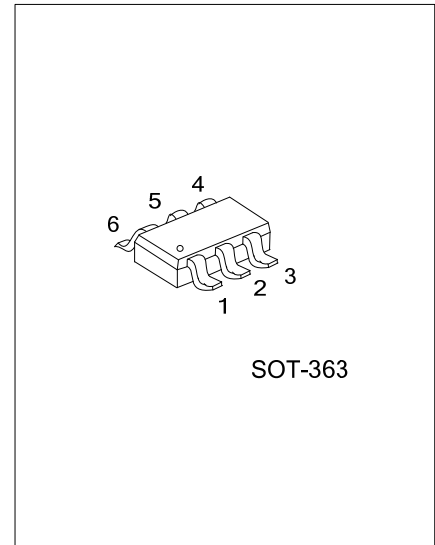
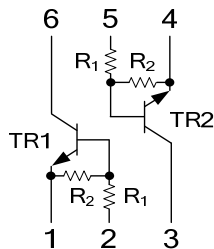
DESCRIPTION

As a compound transistor with resistor, the UTC **UG9K** is for switching application.

FEATURES

- * Silicon epitaxial type
- * The internal two transistor elements are independent.

SYMBOL



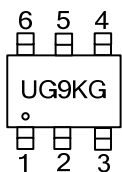
ORDERING INFORMATION

Ordering Number	Package	Pin Assignment						Packing
		1	2	3	4	5	6	
UG9KG-AL6-R	SOT-363	E1	B1	C2	E2	B2	C1	Tape Reel

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

<p>UG9KG-AL6-R</p> <p>(1) Packing Type (2) Package Type (3) Green Package</p>	<p>(1) R: Tape Reel (2) AL6: SOT-363 (3) G: Halogen Free and Lead Free</p>
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MARKING



■ ABSOLUTE MAXIMUM RATINGS ($T_A=25^{\circ}\text{C}$, 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}	10	V
Collector Current	I_C	100	mA
Collector Power Dissipation	P_C	150	mW
Junction Temperature	T_J	+150	$^{\circ}\text{C}$
Storage Temperature	T_{STG}	-55 ~ +150	$^{\circ}\text{C}$

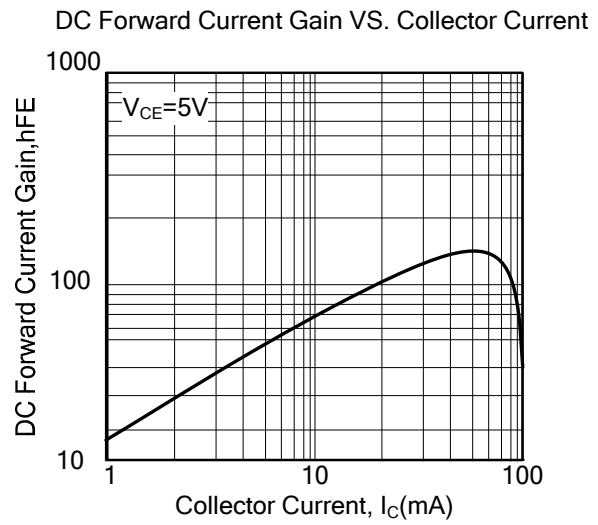
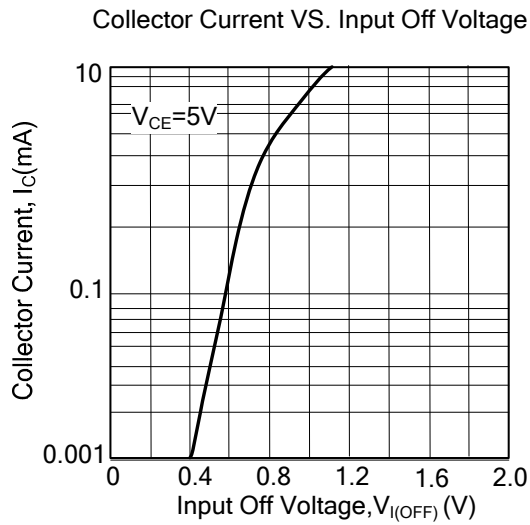
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged.

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

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C=100\mu\text{A}$	50			V
Input Voltage	$V_{IN(ON)}$	$V_{CE}=0.3\text{V}, I_C=10\text{mA}$	3			V
	$V_{IN(OFF)}$	$V_{CE}=5\text{V}, I_C=100\mu\text{A}$			0.5	
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C/I_B=10\text{mA}/0.5\text{mA}$		0.1	0.3	V
Collector Cutoff Current	I_{CBO}	$V_{CB}=50\text{V}$			0.1	μA
DC Current Transfer Ratio	h_{FE}	$V_{CE}=5\text{V}, I_C=5\text{mA}$	30			
Transition Frequency	f_T	$V_{CE}=10\text{V}, I_E=-5\text{mA}$		250		MHz
Input Resistance	R_1		7	10	13	k Ω
Resistor Ratio	R_2/R_1		0.8	1	1.2	

■ TYPICAL CHARACTERISTICS



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