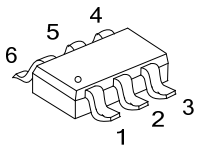
COMPOUND TRANSISTORS
UG9K



SOT-363

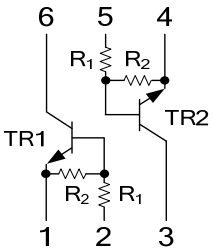
■ DESCRIPTION

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

■ FEATURES

* Silicon epitaxial type
* The internal tow transistor elements are independent.

■ SYMBOL



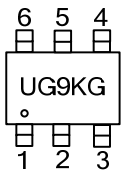
■ ORDERING INFORMATION

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

UG9KG-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

■ MARKING



■ ABSOLUTE MAXIMUM RATINGS (T_A=25°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	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

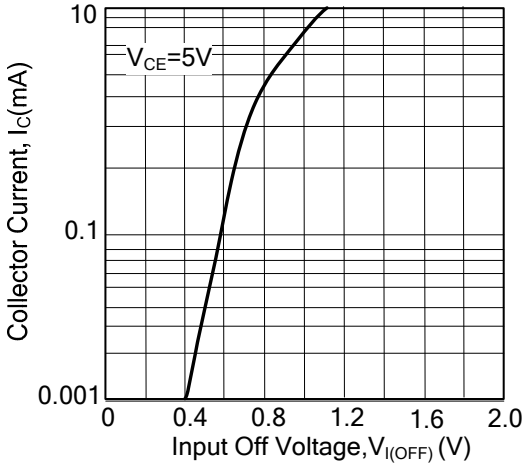
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

■ ELECTRICAL CHARACTERISTICS (T_A=25°C, unless otherwise specified)

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

■ TYPICAL CHARACTERISTICS

Collector Current VS. Input Off Voltage



DC Forward Current Gain VS. Collector Current