



UH11K

Preliminary

NPN EPITAXIAL SILICON TRANSISTOR

DUAL BIAS RESISTOR TRANSISTORS

■ DESCRIPTION

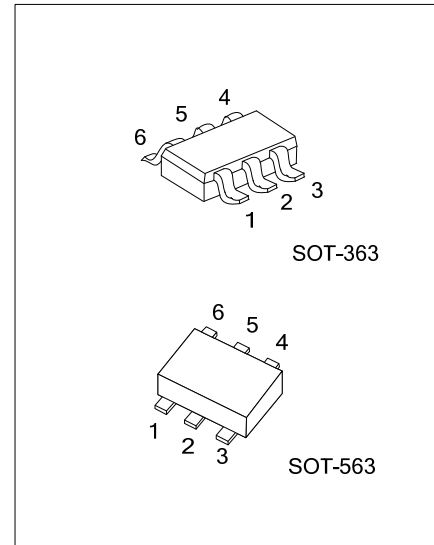
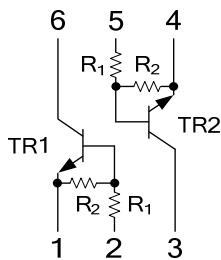
The UTC **UH11K** is a dual bias resistor transistors, it uses UTC's advanced technology to provide customers with saving board space, reducing component count, etc.

The UTC **UH11K** is suitable for low power surface mount applications, etc.

■ FEATURES

- * Reducing component count
- * Saving board space

■ EQUIVALENT CIRCUIT



■ ORDERING INFORMATION

Ordering Number	Package	Pin Assignment						Packing
		1	2	3	4	5	6	
UH11KG-AL6-R	SOT-363	E1	B1	C2	E2	B2	C1	Tape Reel
UH11KG-AN6-R	SOT-563	E1	B1	C2	E2	B2	C1	Tape Reel

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

<p>UH11KG-AL6-R</p> <p>(1)Packing Type</p> <p>(2)Package Type</p> <p>(3)Green Package</p>	<p>(1) R: Tape Reel</p> <p>(2) AL6: SOT-363, AN6: SOT-563</p> <p>(3) G: Halogen Free and Lead Free</p>
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■ MARKING

SOT-363	SOT-563

■ 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
Collector Current		I_C	100	mA
Power Dissipation	SOT-363	P_D	150	mW
	SOT-563		120	mW
Junction Temperature		T_J	-55 ~ +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
OFF CHARACTERISTICS						
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C=10\mu\text{A}$, $I_E=0$	50			V
Collector-Emitter Breakdown Voltage (Note 1)	BV_{CEO}	$I_C=2.0\text{mA}$, $I_B=0$	50			V
Collector-Base Cutoff Current	I_{CBO}	$V_{CB}=50\text{V}$, $I_E=0$			100	nA
Collector-Emitter Cutoff Current	I_{CEO}	$V_{CE}=50\text{V}$, $I_B=0$			500	nA
Emitter-Base Cutoff Current	I_{EBO}	$V_{EB}=6.0\text{V}$, $I_C=0$			0.5	mA
ON CHARACTERISTICS (Note 2)						
DC Current Gain	h_{FE}	$V_{CE}=10\text{V}$, $I_C=5.0\text{mA}$	35	60		
Output Voltage (on)	V_{OL}	$V_{CC}=5.0\text{V}$, $V_B=2.5\text{V}$, $R_L=1.0\text{ k}\Omega$			0.2	V
ON CHARACTERISTICS (Note 2)						
Input Resistor	R_1		7.0	10	13	k Ω
Resistor Ratio	R_1/R_2		0.8	1.0	1.2	k Ω

Notes: 1. Pulse Test: Pulse Width<300 μs , Duty Cycle<2.0%
2. Pulse Test: Pulse Width<300ms, Duty Cycle<2.0%

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