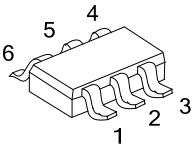
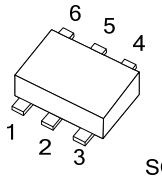
UH11K **Preliminary** ***NPN EPITAXIAL SILICON TRANSISTOR***

DUAL BIAS RESISTOR TRANSISTORS



SOT-363



SOT-563

■ DESCRIPTION

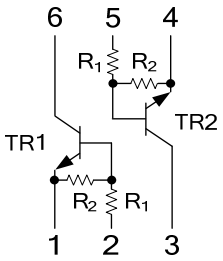
The UTC **UH11K** is a dual bias resistor transistors, it uses UTC's advanced technology to provide customers with saving board space, reducing component count, etc.

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

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

■ MARKING

SOT-363	SOT-563
UHLKG	UHLK

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

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