



**UMT1N**

Preliminary

**DUAL TRANSISTOR**

**GENERAL PURPOSE TRANSISTOR**

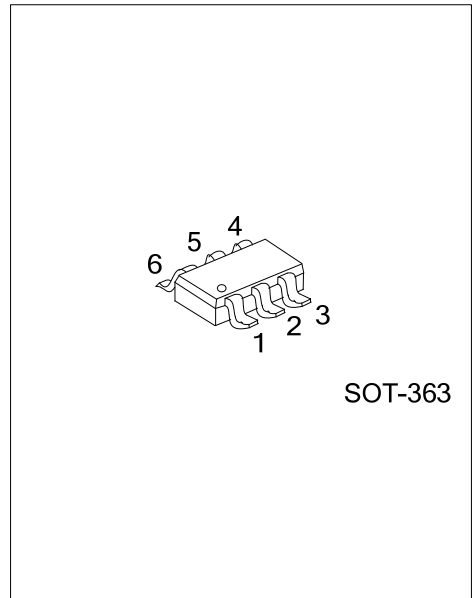
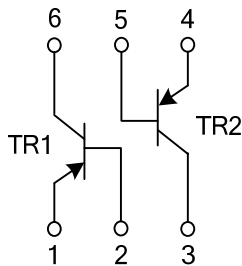
■ DESCRIPTION

The UTC **UMT1N** is a dual transistor, including two PNP transistors. It uses UTC's advanced technology to provide the customers with high DC current gain, etc.

■ FEATURES

\* High DC current gain ( $h_{FE} > 120 @ V_{CE} = -6V, I_C = -1mA$ )

■ EQUIVALENT CIRCUITS

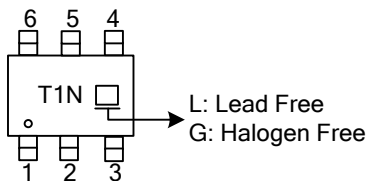


■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment						Packing
Lead Free	Halogen Free		1	2	3	4	5	6	
UMT1NL-AL6-R	UMT1NG-AL6-R	SOT-363	E1	B1	C2	E2	B2	C1	Tape Reel

<p>UMT1NL-AL6-R</p> <ul style="list-style-type: none"> <li>(1) Packing Type</li> <li>(2) Package Type</li> <li>(3) Lead Free</li> </ul>	<ul style="list-style-type: none"> <li>(1) R: Tape Reel</li> <li>(2) AL6: SOT-363</li> <li>(3) L: Lead Free, G: Halogen Free</li> </ul>
---	---

■ MARKING



■ ABSOLUTE MAXIMUM RATINGS ( $T_A=25^{\circ}\text{C}$ )

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	$V_{CBO}$	-60	V
Collector-Emitter Voltage	$V_{CEO}$	-50	V
Emitter-Base Voltage	$V_{EBO}$	-6	V
Collector Current	$I_C$	-0.15	A (DC)
Collector Power Dissipation	$P_C$	0.15	W
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 ( $T_A=25^{\circ}\text{C}$ )

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	$BV_{CBO}$	$I_C=-50\mu\text{A}$	-60			V
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_C=-1\text{mA}$	-50			V
Emitter-Base Breakdown Voltage	$BV_{EBO}$	$I_E=-50\mu\text{A}$	-6			V
Collector CutOff Current	$I_{CBO}$	$V_{CB}=-60\text{V}$			-0.1	$\mu\text{A}$
Emitter CutOff Current	$I_{EBO}$	$V_{EB}=-6\text{V}$			-0.1	$\mu\text{A}$
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C/I_B=-50\text{mA}/-5\text{mA}$			-0.5	V
DC Current Transfer Ratio	$h_{FE}$	$V_{CE}=-6\text{V}, I_C=-1\text{mA}$	120		560	
Transition Frequency	$f_T$	$V_{CE}=-12\text{V}, I_E=2\text{mA}, f=100\text{MHz}$		140		MHz
Output Capacitance	$C_{ob}$	$V_{CB}=-12\text{V}, I_E=0\text{A}, f=1\text{MHz}$		4	5	pF

UTC assumes no responsibility for equipment failures that result from using products at values that exceed, even momentarily, rated values (such as maximum ratings, operating condition ranges, or other parameters) listed in products specifications of any and all UTC products described or contained herein. UTC products are not designed for use in life support appliances, devices or systems where malfunction of these products can be reasonably expected to result in personal injury. Reproduction in whole or in part is prohibited without the prior written consent of the copyright owner. The information presented in this document does not form part of any quotation or contract, is believed to be accurate and reliable and may be changed without notice.