



KTD863

NPN SILICON TRANSISTOR

TRIPLE DIFFUSED NPN TRANSISTOR

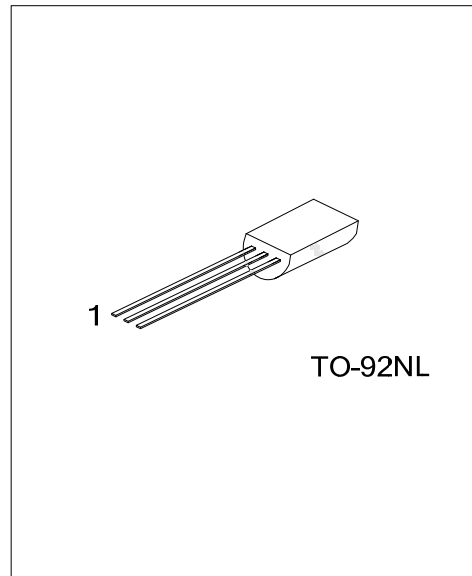
DESCRIPTION

The UTC **KTD863** is a triple diffused NPN transistor. it uses UTC's advanced technology to provide customers with high collector-emitter breakdown voltage and high collector current capability, etc.

The UTC **KTD863** is suitable for voltage regulator, relay and ramp driver, etc.

FEATURES

- * High collector-emitter voltage
- * High collector current capability



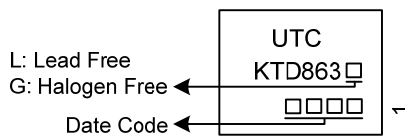
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
KTD863L-x-T9N-B	KTD863G-x-T9N-B	TO-92NL	E	C	B	Tape Box
KTD863L-x-T9N-K	KTD863G-x-T9N-K	TO-92NL	E	C	B	Bulk

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

<p>KTD863G-x-T9N-B</p> <p>(1)Packing Type (2)Package Type (3)Rank (4)Green Package</p>	<p>(1) B: Tape Box, K: Bulk (2) T9N: TO-92NL (3) refer to CLASSIFICATION OF h_{FE1} (4) G: Halogen Free and Lead Free, L: Lead Free</p>
--	--

MARKING



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

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V_{CBO}	60	V
Collector-Emitter Voltage	V_{CEO}	60	V
Emitter-Base Voltage	V_{EBO}	5	V
Continuous Collector Current	DC	I_C	1
	Pulse	I_{CP}	2
Collector Power Dissipation	P_C	1	W
Junction Temperature	T_J	+150	$^\circ\text{C}$
Storage Temperature Range	T_{STG}	-55 ~ +150	$^\circ\text{C}$

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

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

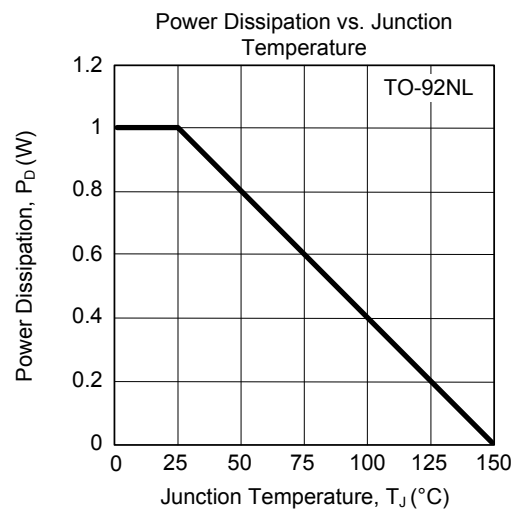
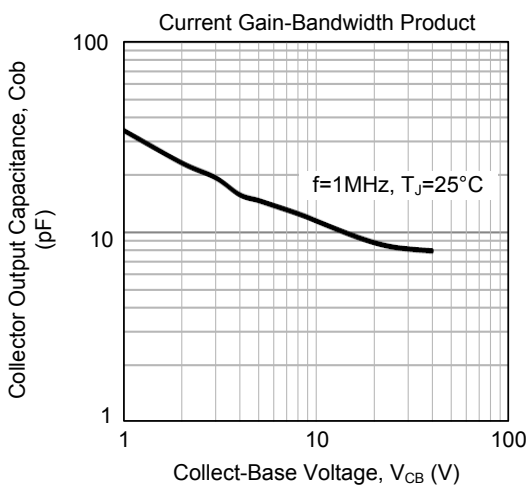
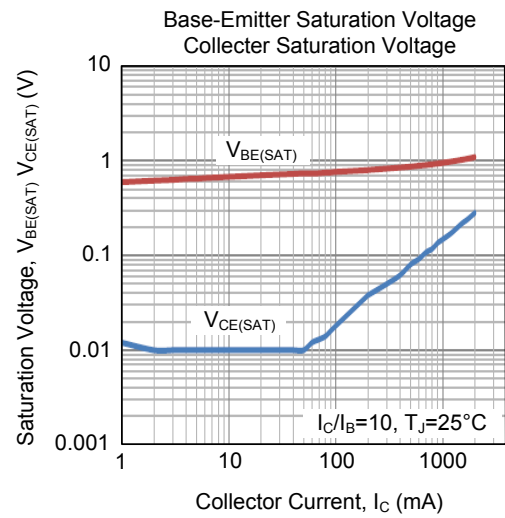
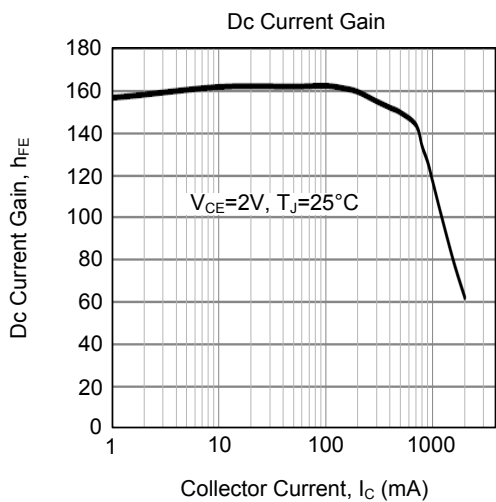
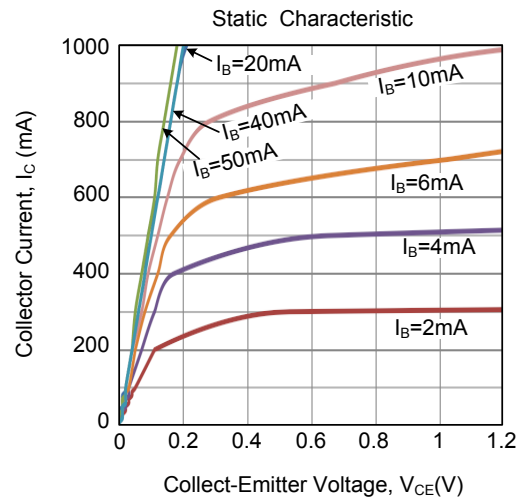
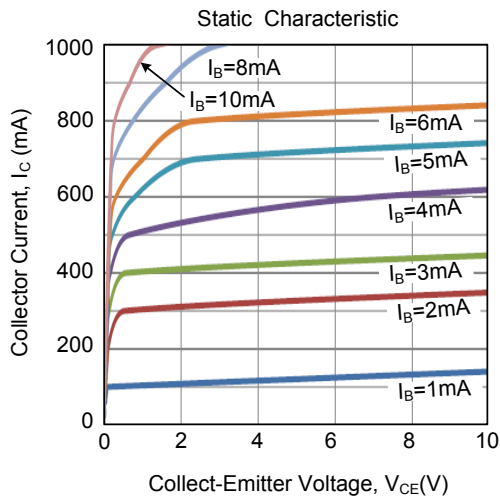
■ ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=1\text{mA}, I_B=0$	60			V
Collector Cut-Off Current	I_{CBO}	$V_{CB}=50\text{V}, I_E=0$			1	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB}=4\text{V}, I_C=0$			1	μA
Collector-Emitter Saturation Voltage	$V_{CE(sat)}$	$I_C=500\text{mA}, I_B=50\text{mA}$		0.15	0.5	V
Base-Emitter Saturation Voltage	$V_{BE(sat)}$	$I_C=500\text{mA}, I_B=50\text{mA}$		0.85	1.2	V
DC Current Gain	h_{FE1}	$I_C=50\text{mA}, V_{CE}=2\text{V}$	60		320	
	h_{FE2}	$I_C=1\text{A}, V_{CE}=2\text{V}$	30			
Transition Frequency	f_T	$I_C=50\text{mA}, V_{CE}=10\text{V}$		150		MHz
Collector Output Capacitance	C_{ob}	$V_{CB}=10\text{V}, f=1\text{MHz}, I_E=0$		12		pF

■ CLASSIFICATION OF h_{FE1}

RANK	O	Y	GR
RANGE	60~120	100~200	160~320

■ TYPICAL CHARACTERISTICS



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. UTC reserves the right to make changes to information published in this document, including without limitation specifications and product descriptions, at any time and without notice. This document supersedes and replaces all information supplied prior to the publication hereof.