

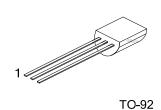
# 9015

# PNP EPITAXIAL SILICON TRANSISTOR

# PRE-AMPLIFIER, LOW LEVEL & LOW NOISE

# FEATURES

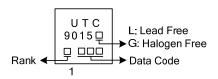
- \* High total power dissipation. (450mW)
- \* Excellent hFE linearity.
- \* Complementary to UTC 9014



## ORDERING INFORMATION

Ordering Number		Deelvere	Pin Assignment			De ekin e	
Lead Free	Halogen Free	Package	1 2 3		3	Packing	
9015L-x-T92-B	9015G-x-T92-B	TO-92	Е	В	С	Tape Box	
9015L-x-T92-K	9015G-x-T92-K	TO-92	Е	В	С	Bulk	
Note: Pin assignment: E: Emitter B: Base C: Collector							
9015 <u>L</u> - x - <u>T92</u> - B	<ol> <li>(1) B: Tape Box, k</li> <li>(2) T92: TO-92</li> <li>(3) x: refer to Clas</li> <li>(4) L: Lead Free, 0</li> </ol>	sificatic					

#### MARKING



PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V <sub>CBO</sub>	-50	V
Collector-Emitter Voltage	V <sub>CEO</sub>	-45	V
Emitter-Base Voltage	V <sub>EBO</sub>	-5	V
Collector Current	lc	-100	mA
Collector Dissipation	Pc	450	mW
Junction Temperature	TJ	+150	°C
Storage Temperature	T <sub>STG</sub>	-55~+150	°C

#### ■ ABSOLUTE MAXIMUM RATINGS (T<sub>A</sub>=25°C, unless otherwise specified )

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<sub>A</sub>=25°C, unless otherwise specified)

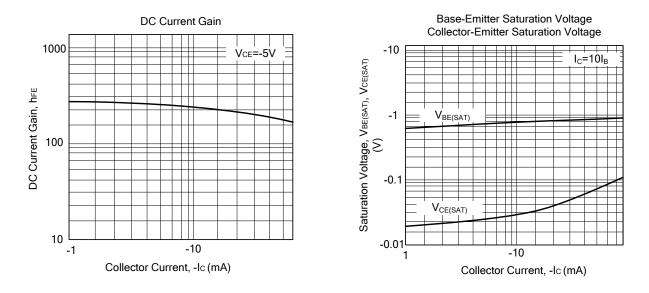
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	ВV <sub>сво</sub>	$I_{\rm C} = -100 \mu A, I_{\rm E} = 0$	-50			V
Collector-Emitter Breakdown Voltage	BV <sub>CEO</sub>	$I_{\rm C} = -1 {\rm mA},  I_{\rm B} = 0$	-45			V
Emitter-Base Breakdown Voltage	BV <sub>EBO</sub>	$I_E = -100 \mu A$ , $I_C = 0$	-5			V
Collector-Emitter Saturation Voltage	V <sub>CE(sat)</sub>	$I_{\rm C} = -100 {\rm mA}, I_{\rm B} = -5 {\rm mA}$		-0.2	-0.7	V
Base-Emitter Saturation Voltage	V <sub>BE(sat)</sub>	$I_{\rm C} = -100 {\rm mA}, I_{\rm B} = -5 {\rm mA}$		-0.82	-1.0	V
Base-Emitter On Voltage	V <sub>BE(on)</sub>	$V_{CE} = -5V, I_{C} = -2mA$	-0.6	-0.65	-0.75	V
Collector Cutoff Current	I <sub>CBO</sub>	$V_{CB} = -50V, I_E = 0$			-50	nA
Emitter Cutoff Current	I <sub>EBO</sub>	$V_{EB} = -5V, I_{C} = 0$			-100	nA
DC Current Gain	h <sub>FE</sub>	$V_{CE} = -5V, I_{C} = -1mA$	60	200	600	
Output Capacitance	C <sub>ob</sub>	$V_{CB} = -10V, I_E = 0, f = 1MHz$		4.5	7.0	рF
Current Gain-Bandwidth Product	f⊤	$V_{CE} = -5V, I_{C} = -10mA$	100	190		MHz
Noise Figure	NF	V <sub>CE</sub> = -5V, I <sub>C</sub> = -0.2mA f = 1KHz, Rs = 1KΩ		0.7	10	dB

## CLASSIFICATION OF h<sub>FE</sub>

RANK	А	В	С
RANGE	60-150	100-300	200-600



# TYPICAL CHARACTERICS



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.

