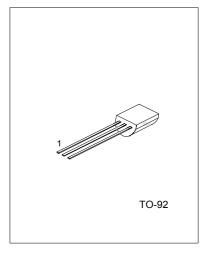
# PRE-AMPLIFIER, LOW LEVEL & **LOW NOISE**

#### **FEATURES**

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



1: EMITTER 2: BASE 3: COLLECTOR

## ABSOLUTE MAXIMUM RATINGS ( Ta=25°C ,unless otherwise specified )

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	Vсво	-50	V
Collector-emitter voltage	VCEO	-45	V
Emitter-base voltage	VEBO	-5	V
Collector current	Ic	-100	mA
Collector dissipation	Pc	450	mW
Junction Temperature	Tj	150	°C
Storage Temperature	Tstg	-55 ~ +150	°C

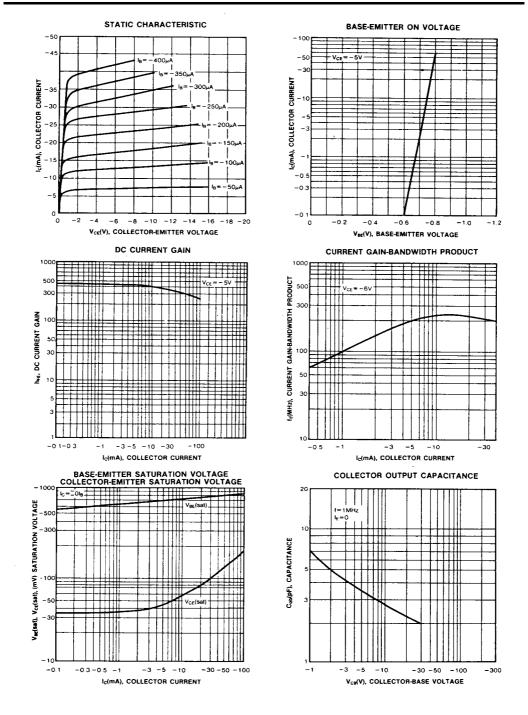
### ELECTRICAL CHARACTERISTICS (Ta=25°C, unless otherwise specified)

LELECTITION LE OTIVITATION (Ta 20 0, amess otherwise specimea)									
PARAMETER	SYMBOL TEST CONDITIONS		MIN	TYP	MAX	UNIT			
Collector-base breakdown voltage	ВУсво	Ic=-100μA, IE=0	-50			V			
Collector-emitter breakdown voltage	BVCEO	Ic=-1mA, IB=0	-45			V			
Emitter-base breakdown voltage	ВУЕВО	IE=-100μA, Ic=0	-5			V			
Collector cutoff current	Ісво	Vcb=-50V, IE=0			-50	nA			
Emitter cutoff current	IEBO	VEB=-5V, IC=0			-100	nA			
DC current gain	hFE	Vce=-5V, Ic=-1mA	60	200	600				
Collector-emitter saturation voltage	Vce(sat)	Ic=-100mA, IB=-5mA		-0.2	-0.7	V			
Base-emitter saturation voltage	VBE(sat)	Ic=-100mA, IB=-5mA		-0.82	-1.0	V			
Base-emitter on voltage	VBE(on)	Vce=-5V, Ic=-2mA	-0.6	-0.65	-0.75	V			
Output Capacitance	Cob	Vcb=-10V, IE=0, f=1MHz		4.5	7.0	pF			
Current gain-Bandwidth Porduct fT		VCE=-5V, Ic=-10mA 100		190		MHz			
Noise Figure	NF	VCE=-5V, Ic=-0.2mA 0.7		10	dB				
		f=1KHz, Rs=1KΩ							

### **CLASSIFICATION OF hFE**

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

UTC UNISONIC TECHNOLOGIES CO., LTD.



UNISONIC TECHNOLOGIES CO., LTD. 2

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.

UTC UNISONIC TECHNOLOGIES CO., LTD. 3

QW-R201-032,A