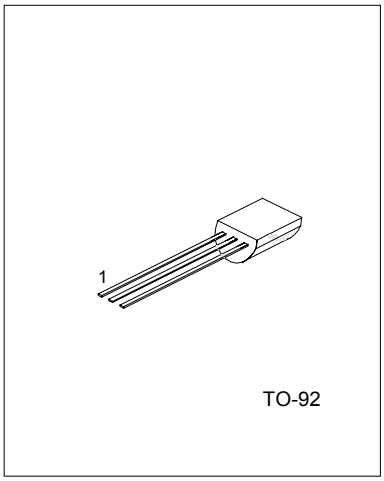
UTC 9015 PNP EPITAXIAL SILICON TRANSISTOR

PRE-AMPLIFIER, LOW LEVEL & LOW NOISE



1: EMITTER 2: BASE 3: COLLECTOR

FEATURES

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

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

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V_{CBO}	-50	V
Collector-emitter voltage	V_{CEO}	-45	V
Emitter-base voltage	V_{EBO}	-5	V
Collector current	Ic	-100	mA
Collector dissipation	Pc	450	mW
Junction Temperature	T_j	150	°C
Storage Temperature	T_{STG}	-55 ~ +150	°C

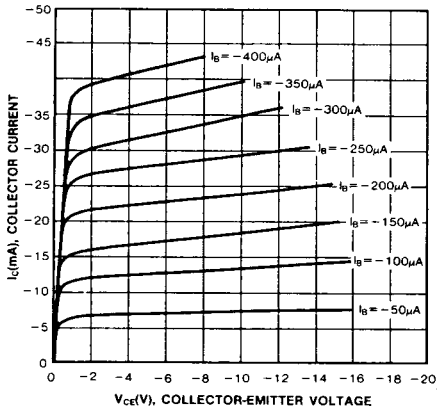
ELECTRICAL CHARACTERISTICS (Ta=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	BV_{CBO}	I_C=-100μA, I_E=0	-50			V
Collector-emitter breakdown voltage	BV_{CEO}	I_C=-1mA, I_B=0	-45			V
Emitter-base breakdown voltage	BV_{EBO}	I_E=-100μA, I_C=0	-5			V
Collector cutoff current	I_{CBO}	V_{CB}=-50V, I_E=0			-50	nA
Emitter cutoff current	I_{EBO}	V_{EB}=-5V, I_C=0			-100	nA
DC current gain	hFE	V_{CE}=-5V, I_C=-1mA	60	200	600	
Collector-emitter saturation voltage	V_{CE}(sat)	I_C=-100mA, I_B=-5mA		-0.2	-0.7	V
Base-emitter saturation voltage	V_{BE}(sat)	I_C=-100mA, I_B=-5mA		-0.82	-1.0	V
Base-emitter on voltage	V_{BE}(on)	V_{CE}=-5V, I_C=-2mA	-0.6	-0.65	-0.75	V
Output Capacitance	Cob	V_{CB}=-10V, I_E=0, f=1MHz		4.5	7.0	pF
Current gain-Bandwidth Porduct	fT	V_{CE}=-5V, I_C=-10mA	100	190		MHz
Noise Figure	NF	V_{CE}=-5V, I_C=-0.2mA f=1KHz, Rs=1KΩ		0.7	10	dB

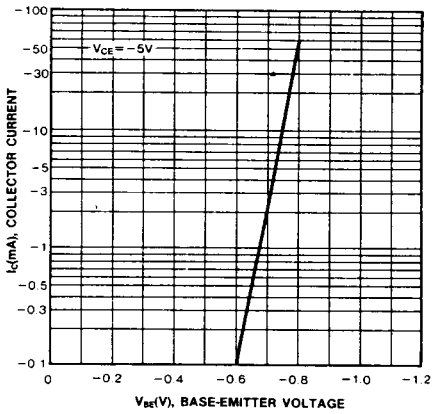
CLASSIFICATION OF hFE

RANK	A	B	C
RANGE	60-150	100-300	200-600

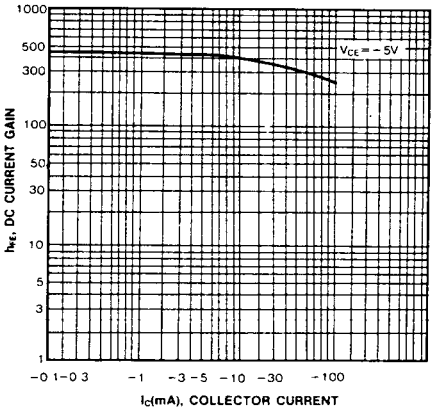
STATIC CHARACTERISTIC



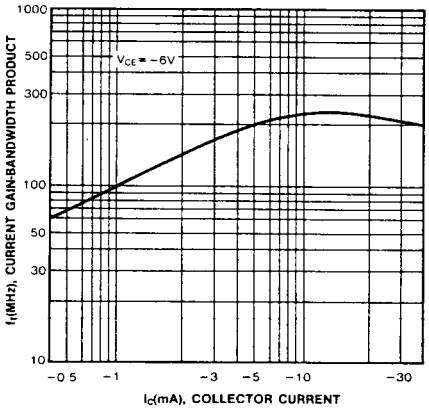
BASE-EMITTER ON VOLTAGE



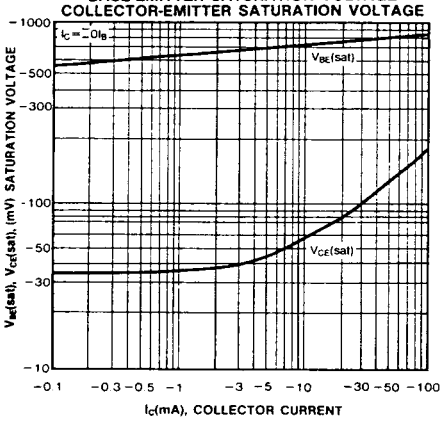
DC CURRENT GAIN



CURRENT GAIN-BANDWIDTH PRODUCT



BASE-EMITTER SATURATION VOLTAGE
COLLECTOR-EMITTER SATURATION VOLTAGE



COLLECTOR OUTPUT CAPACITANCE