

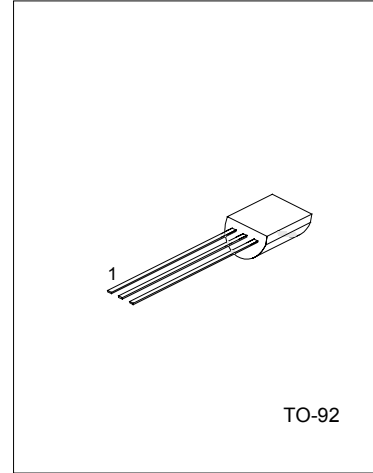
UTC2SA1015

PNP EPITAXIAL SILICON TRANSISTOR

LOW FREQUENCY PNP
AMPLIFIER TRANSISTOR

FEATURES

- *Collector-Emitter Voltage:
BV_{CEO}=-50V
- *Collector current up to 150mA
- *High hFE linearity
- *Complement to 2SC1815



1:EMITTER 2:COLLECTOR 3: BASE

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

PARAMETER	SYMBOL	RATING	UNIT
Collector-base voltage	V _{CB0}	-50	V
Collector-emitter voltage	V _{CEO}	-50	V
Emitter-base voltage	V _{EB0}	-5	V
Collector dissipation	P _c	400	mW
Collector current	I _c	-150	mA
Base current	I _B	-50	mA
Junction Temperature	T _j	125	°C
Storage Temperature	T _{STG}	-65 ~ +150	°C

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-base breakdown voltage	BV _{CB0}	I _c =-100μA,I _E =0	-50			V
Collector-emitter breakdown voltage	BV _{CEO}	I _c =-10mA,I _B =0	-50			V
Emitter-base breakdown voltage	BV _{EB0}	I _E =-10μA,I _c =0	-5			V
Collector cut-off current	I _{cB0}	V _{CB} =-50V,I _E =0			-100	nA
Emitter cut-off current	I _{EB0}	V _{EB} =-5V,I _c =0			-100	nA
DC current gain(note)	hFE1 hFE2	V _{CE} =-6V,I _c =-2mA V _{CE} =-6V,I _c =-150mA	120 25		700	
Collector-emitter saturation voltage	V _{CE(sat)}	I _c =-100mA,I _B =-10mA		-0.1	-0.3	V
Base-emitter saturation voltage	V _{BE(sat)}	I _c =-100mA,I _B =-10mA			-1.1	V
Current gain bandwidth product	f _T	V _{CE} =-10V,I _c =-1mA	80			MHz
Output capacitance	C _{ob}	V _{CB} =-10V,I _E =0,f=1MHz		4.0	7.0	pF
Noise Figure	NF	I _c =-0.1mA,V _{CE} =-6V R _G =1kΩ,f=100Hz		0.5	6	dB

UTC UNISONIC TECHNOLOGIES CO. LTD

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QW-R201-004,B

UTC2SA1015 PNP EPITAXIAL SILICON TRANSISTOR

CLASSIFICATION OF hFE1

RANK	Y	GR	BL
RANGE	120-240	200-400	350-700

TYPICAL CHARACTERISTIC CURVES

Fig.1 Static characteristics

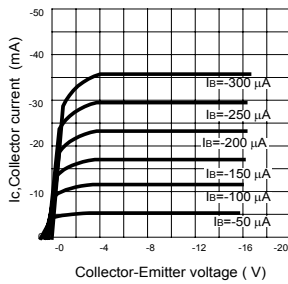


Fig.2 DC current Gain

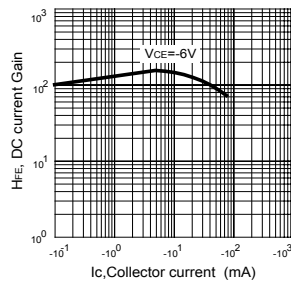


Fig.3 Base-Emitter on Voltage

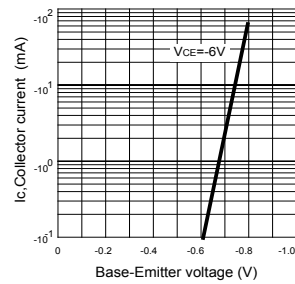


Fig.4 Saturation voltage

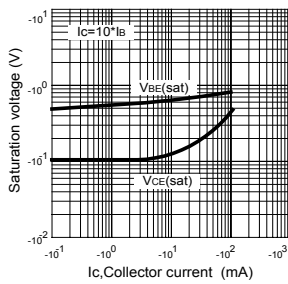


Fig.5 Current gain-bandwidth product

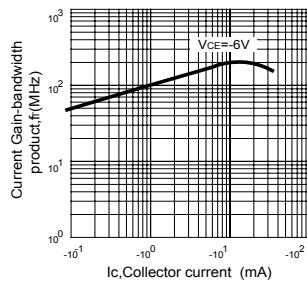


Fig.6 Collector output Capacitance

