

UTC2SA1507 PNP EPITAXIAL SILICON TRANSISTORS

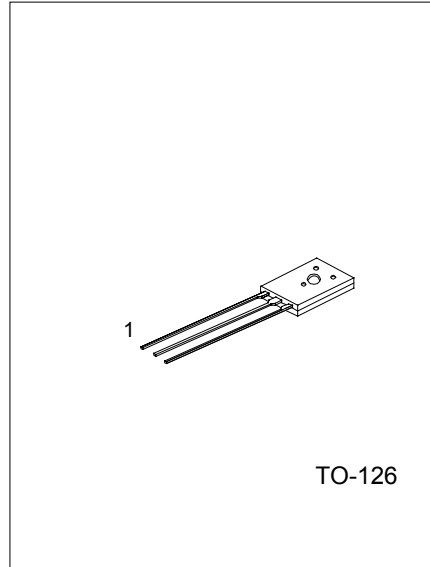
SWITCHING TRANSISTOR

APPLICAITONS

*Color TV audio output, converters, inverters.

FEATURES

- *High breakdown voltage
- *Large current capacitance.
- *High-speed switching



1:EMITTER 2:COLLECTOR 3:BASE

ABSOLUTE MAXIMUM RATINGS (Ta=25°C)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V _{CB0}	-180	V
Collector-Emitter Voltage	V _{CEO}	-160	V
Emitter-Base Voltage	V _{EBO}	-6	V
Collector Current	I _c	-1.5	A
Collector Current (Peak)	I _{cp}	-2.5	A
Collector Dissipation	P _c	1.5	W
Collector Dissipation(T _c =25°C)	P _c	10	W
Junction Temperature	T _j	150	°C
Storage Temperature	T _{STG}	-55 to +150	°C

ELECTRICAL CHARACTERISTICS (Ta=25°C)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-to-Base Breakdown Voltage	V _{(BR)CBO}	I _c =-10μA, I _E =0	-180			V
Collector-to-Base Breakdown Voltage	V _{(BR)CEO}	I _c = -1mA, R _{BE} =∞	-160			V
Emitter-to-Base Breakdown Voltage	V _{(BR) EBO}	I _c =0, I _E = -10μA	-6			V
Collector Cut-Off Current	I _{CBO}	V _{CB} = -120V, I _E =0			-0.1	μA
Emitter Cut-Off Current	I _{EBO}	V _{EB} = -4V, I _c =0			-0.1	μA
DC Current Gain	h _{FE1}	V _{CE} = -5V, I _c = -100mA	100		400	
	h _{FE2}	V _{CE} = -5V, I _c = -10mA	90			
Collector-Emitter Saturation Voltage	V _{CE(sat)}	I _c = -500mA, I _B = -50mA		-0.2	-0.5	V
Base-Emitter Saturation Voltage	V _{BE(sat)}	I _c = -500mA, I _B = -50mA		-0.83	-1.2	V
Gain Bandwidth Product	f _T	V _{CE} = -10V, I _c = -50mA		120		MHz
Output Capacitance	C _{ob}	V _{CB} = -10V, f=1MHz		22		pF
Turn-On Time	t _{on}	See specified Test Circuit		0.04		μs

UTC UNISONIC TECHNOLOGIES CO. LTD

1

QW-R204-009,A

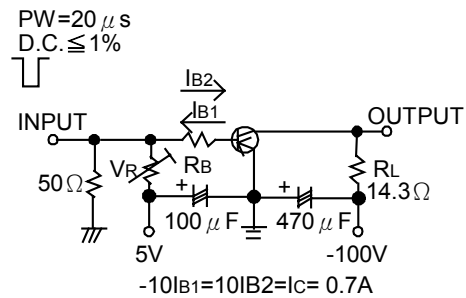
UTC2SA1507 PNP EPITAXIAL SILICON TRANSISTORS

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Storage Time	tstg	See specified Test Circuit		0.7		μ s
Fall Time	tf	See specified Test Circuit		0.04		μ s

CLASSIFICATION OF hFE1

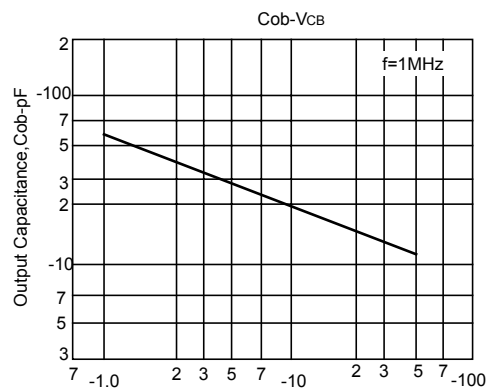
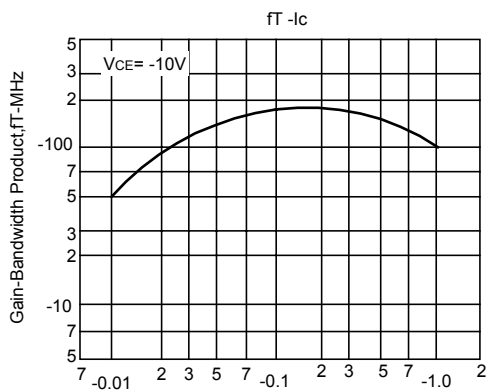
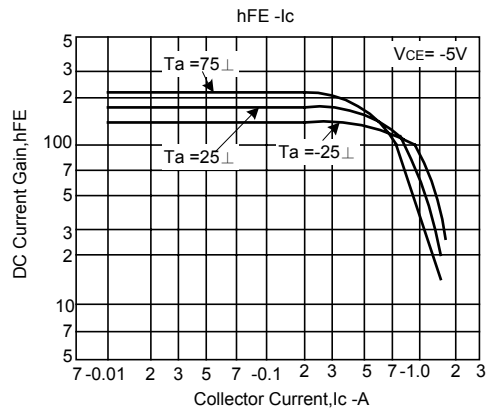
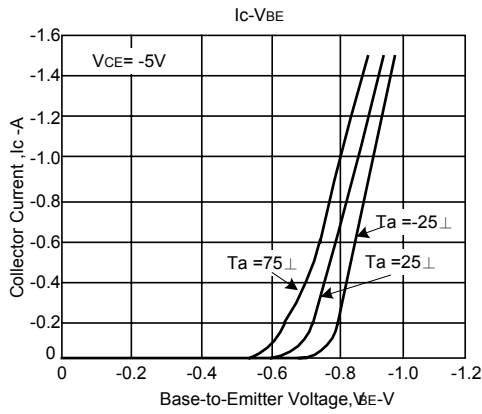
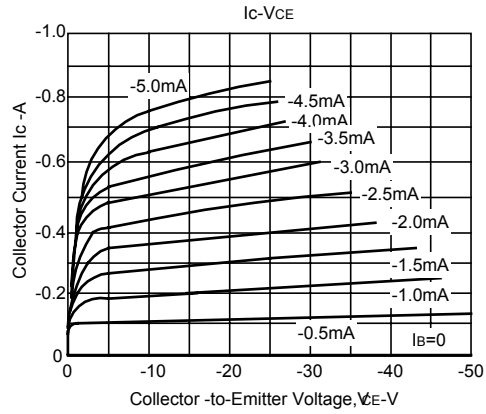
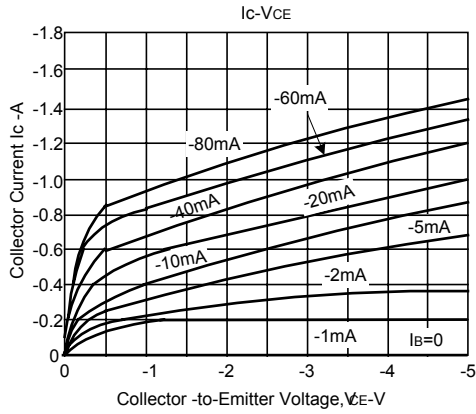
RANK	R	S	T
RANGE	100-200	140-280	200-400

SWITCHING TIME TEST CIRCUIT

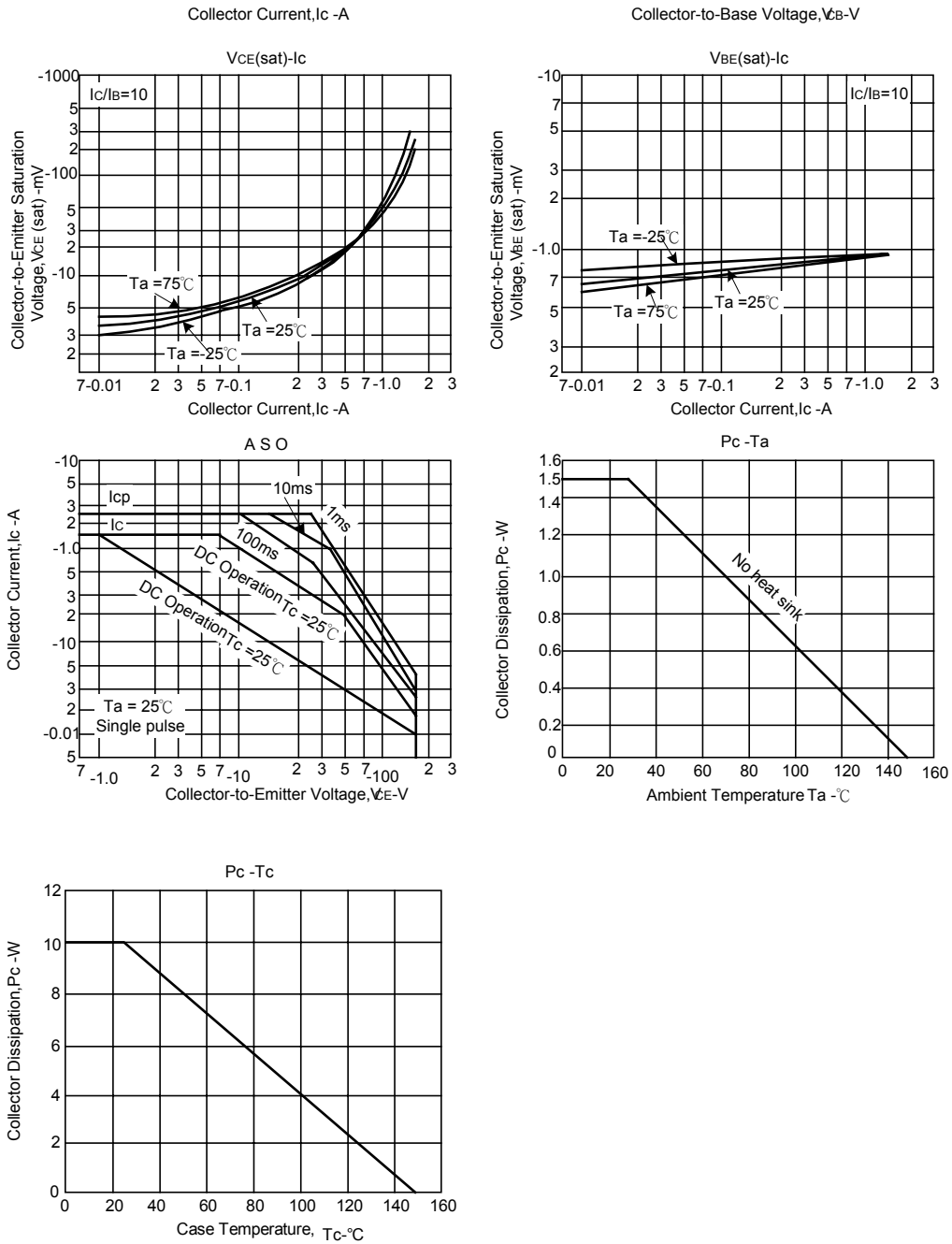


UTC2SA1507 PNP EPITAXIAL SILICON TRANSISTORS

TYPICAL CHARACTERISTICS



UTC2SA1507 PNP EPITAXIAL SILICON TRANSISTORS



UTC2SA1507 PNP EPITAXIAL SILICON TRANSISTORS

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.