



2SA1694

PNP EPITAXIAL SILICON TRANSISTOR

SILICON PNP EPITAXIAL PLANAR TRANSISTOR

DESCRIPTION

The UTC **2SA1694** is a silicon PNP epitaxial planar transistor, it uses UTC's advanced technology to provide the customers with high DC current gain and high collector-base breakdown voltage, etc.

The UTC **2SA1694** is suitable for audio and general purpose, etc.

FEATURES

- * High DC current gain
- * High collector-base breakdown voltage

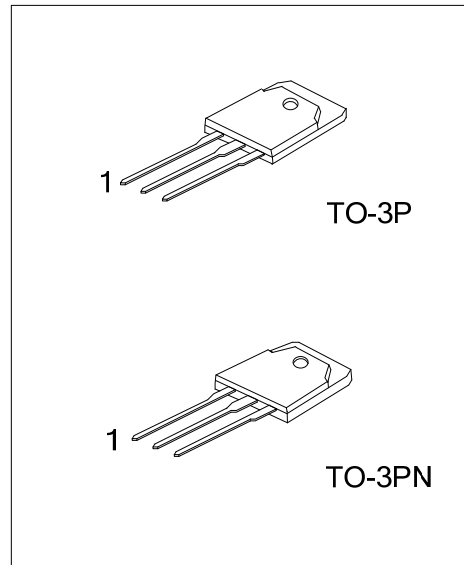
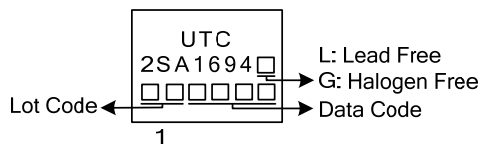
ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SA1694L-x-T3P-T	2SA1694G-x-T3P-T	TO-3P	B	C	E	Tube
2SA1694L-x-T3N-T	2SA1694G-x-T3N-T	TO-3PN	B	C	E	Tube

Note: Pin Assignment: B: Base C: Collector E: Emitter

<p>2SA1694L-x-T3P-T</p> <p>(1) Packing Type (2) Package Type (3) Rank (4) Green Package</p>	<p>(1) T: Tube (2) T3P: TO-3P, T3N: TO-3PN (3) x: reference to Classification of h_{FE} (4) L: Lead Free, G: Halogen Free and Lead Free</p>
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MARKING



2SA1694

PNP EPITAXIAL SILICON TRANSISTOR

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

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V _{CBO}	-120	V
Collector-Emitter Voltage	V _{CEO}	-120	V
Emitter-Base Voltage	V _{EBO}	-6	V
Collector Current	I _C	-8	A
Base Current	I _B	-3	A
Collector Power Dissipation (T _C =25°C)	P _C	80	W
Junction Temperature	T _J	150	°C
Storage Temperature	T _{STG}	-55 ~150	°C

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.

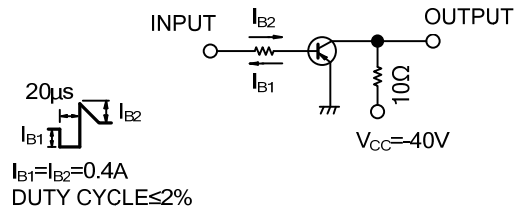
■ ELECTRICAL CHARACTERISTICS (T_A=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cut-Off Current	I _{CBO}	V _{CB} =-120V			-10	μA
Emitter Cut-Off Current	I _{EBO}	V _{EB} =-6V			-10	μA
Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C =-50mA	-120			V
DC Current Gain	h _{FE}	V _{CE} =-4V, I _C =-3A	50		180	
Collector-Emitter Saturation Voltage	V _{CE(SAT)}	I _C =-3A, I _B =-0.3A			-1.5	V
Current Gain Bandwidth Product	f _T	V _{CE} =-12V, I _E =0.5A		20		MHz
Output Capacitance	C _{ob}	V _{CB} =-10V, f=1MHz		300		pF
Switching time	Turn-on time	V _{CC} =-40V, R _L =10Ω, I _C =-4A, I _{B1} =0.4A I _{B2} =0.4A		0.14		μS
	Storage time			1.40		μS
	Fall time			0.21		μS

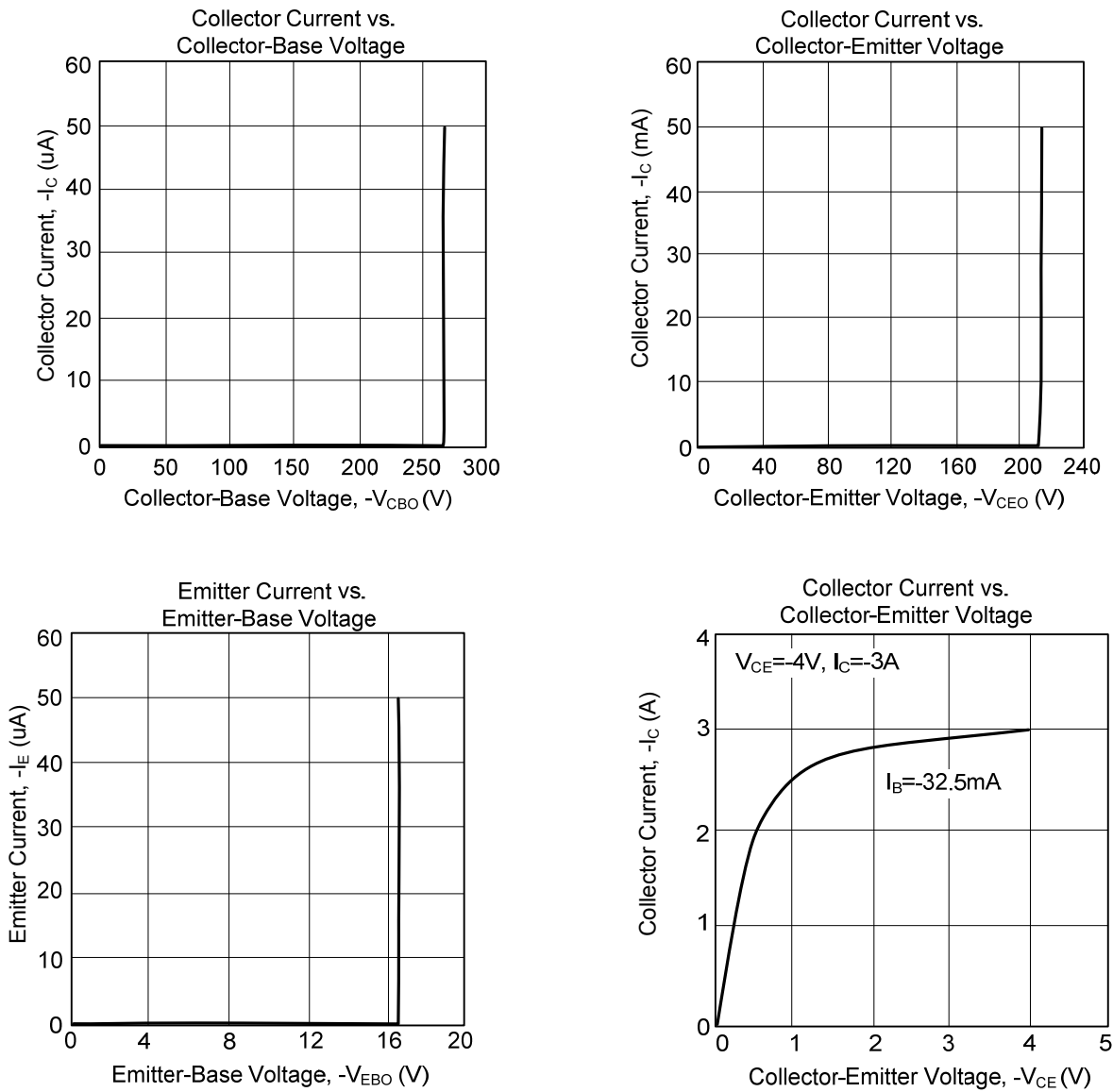
■ CLASSIFICATION OF h_{FE}

RANK	O	P	Y
RANGE	50~100	70~140	90~180

■ TEST CIRCUIT



TYPICAL CHARACTERISTICS



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.