



2SA1694

PNP EPITAXIAL SILICON TRANSISTOR

SILICON PNP EPITAXIAL PLANAR TRANSISTOR

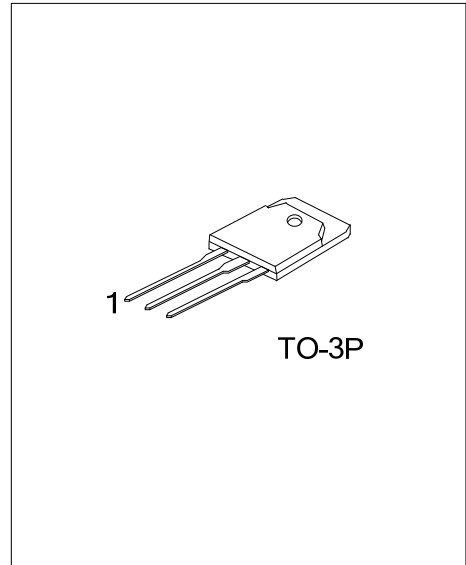
DESCRIPTION

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



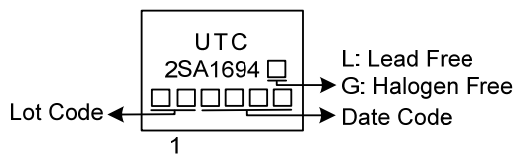
ORDERING INFORMATION

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

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

<p>2SA1694G-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 (3) x: reference to Classification of h_{FE} (4) G: Halogen Free and Lead Free, L: Lead Free</p>
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MARKING



■ 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.

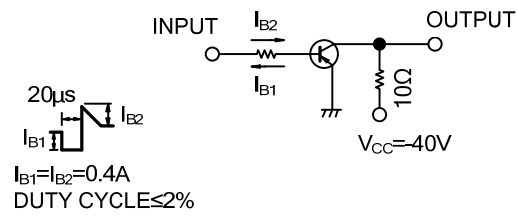
■ ELECTRICAL CHARACTERISTICS (T_A=25°C, unless otherwise specified)

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

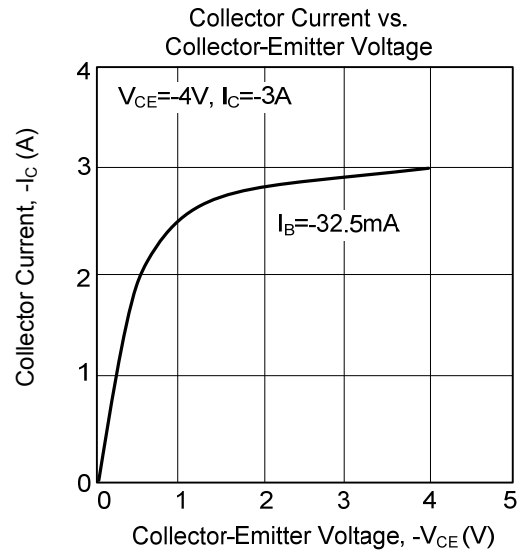
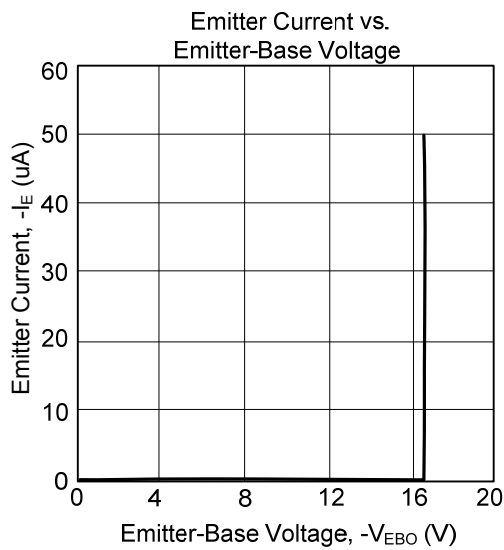
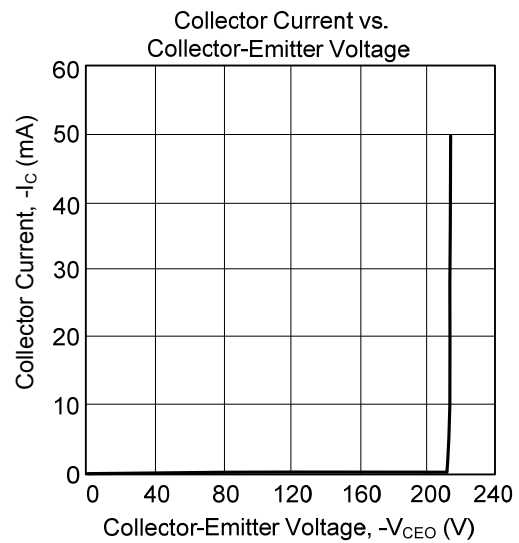
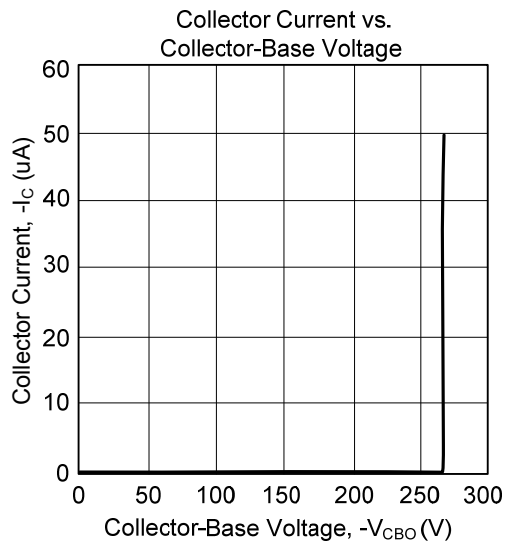
■ CLASSIFICATION OF h_{FE}

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

■ TEST CIRCUIT



■ TYPICAL CHARACTERISTICS



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