



TIP122

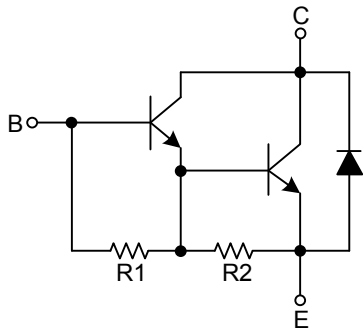
NPN SILICON TRANSISTOR

NPN EPITAXIAL TRANSISTOR

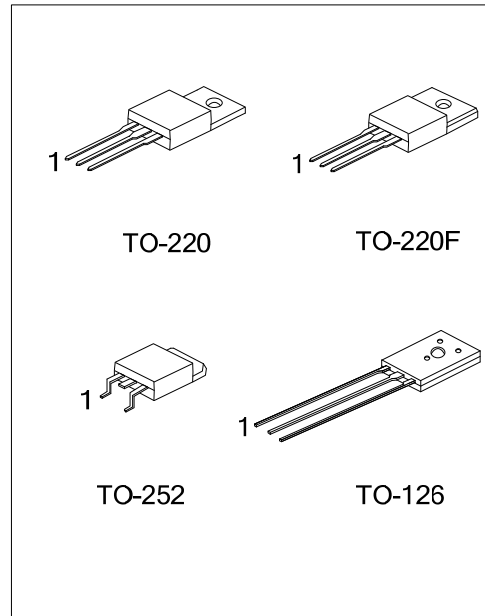
■ DESCRIPTION

The UTC **TIP122** is a NPN epitaxial transistor, designed for use in general purpose amplifier low-speed switching applications.

■ EQUIVALENT TEST



($R_1 \approx 6k\Omega$, $R_2 \approx 0.5k\Omega$)



■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Normal	Lead Free Plating		1	2	3	
TIP122-T60-K	TIP122L-T60-K	TO-126	E	C	B	Bulk
TIP122-TA3-T	TIP122L-TA3-T	TO-220	B	C	E	Tube
TIP122-TF3-T	TIP122L-TF3-T	TO-220F	B	C	E	Tube
TIP122-TN3-R	TIP122L-TN3-R	TO-252	B	C	E	Tape Reel

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

<p>TIP122L-T60-K</p>	<p>(1) Packing Type (2) Package Type (3) Green Package</p>	<p>(1) K: Bulk, T: Tube, R: Tape Reel (2) T60: TO-126, TA3: TO-220, TF3: TO-220F TN3: TO-252 (3) L: Lead Free, G: Halogen Free</p>
----------------------	--	--

■ MARKING

TO-220 / TO-220F / TO-252	TO-126

■ ABSOLUTE MAXIMUM RATINGS (T_A=25°C)

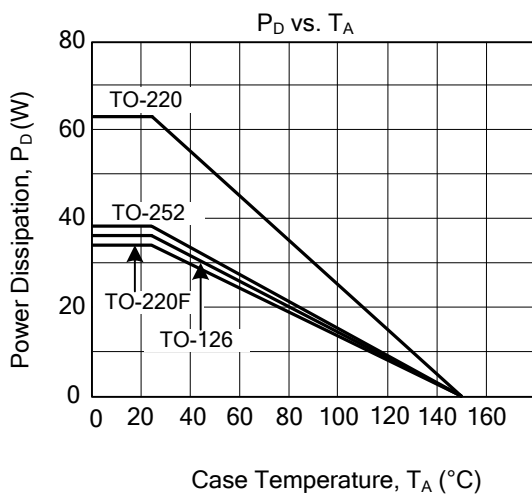
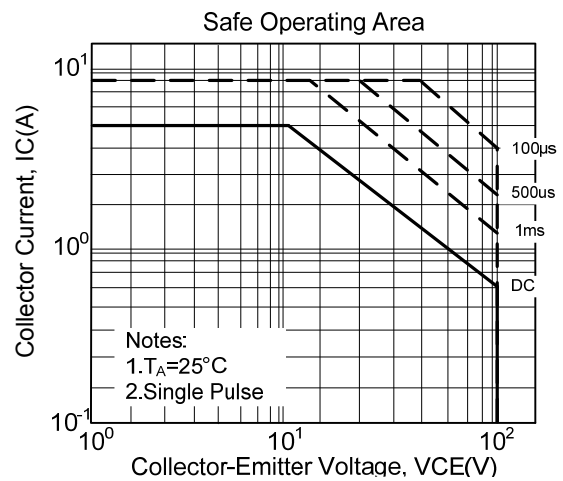
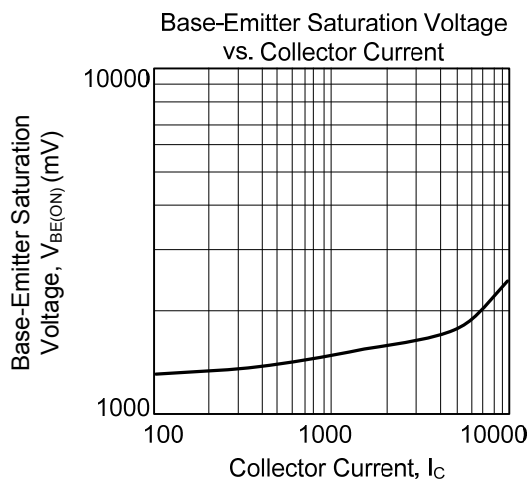
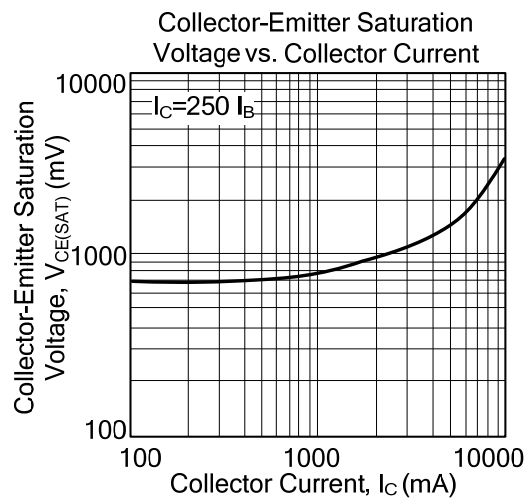
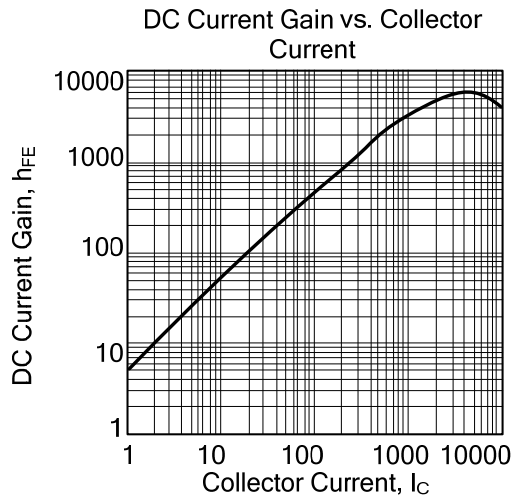
PARAMETER		SYMBOL	RATINGS	UNIT
Collector to Base Voltage		V _{CBO}	100	V
Collector to Emitter Voltage		V _{CEO}	100	V
Emitter to Base Voltage		V _{EBO}	5	V
IC Collector Current		I _C	5	A
Power Dissipation (T _C =25°C)	TO-126	P _D	36	W
	TO-220		65	W
	TO-220F		34	W
	TO-252		38	W
Junction Temperature		T _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)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C =100mA	100			V
Collector-Emitter Saturation Voltage	V _{CE(SAT)1}	I _C =3A, I _B =12mA			2	V
Collector-Emitter Saturation Voltage	V _{CE(SAT)2}	I _C =5A, I _B =20mA			4	V
Base-Emitter Saturation Voltage	V _{BE(ON)}	V _{CE} =3V, I _C =3A			2.5	V
Collector Cut-Off Current	I _{CBO}	V _{CB} =100V			200	uA
Collector-Cut-Off Current	I _{CEO}	V _{CE} =50V			500	uA
Emitter Cut-Off Current	I _{EBO}	V _{EB} =5V			2	mA
DC Current Gain	h _{FE}	I _C =500mA, V _{CE} =3V	1000			
		I _C =3A, V _{CE} =3V	1000			

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.