

**UTC** UNISONIC TECHNOLOGIES CO., LTD

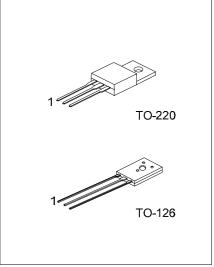
# TIP122

### 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.



\*Pb-free plating product number: TIP122L

#### ORDERING INFORMATION

Ordering Number		Dookogo	Pin Assignment			Dooking	
Normal	Lead Free Plating	Package	1	2	3	Packing	
TIP122-T60-K	TIP122L-T60-K	TO-126	Е	С	В	Bulk	
TIP122-TA3-T	TIP122L-TA3-T	TO-220	В	С	Е	Tube	

TIP122 <u>L-T60-K</u>	(1)Packing Type	(1) K: Bulk, T: Tube
	(2)Package Type	(2) T60: TO-126, TA3: TO-220
	(3)Lead Plating	(3) L: Lead Free Plating, Blank: Pb/Sn

#### ■ ABSOLUTE MAXIMUM RATINGS (Ta=25 )

PARAMETER		SYMBOL	RATINGS	UNIT
Collector to Base Voltage		V <sub>CBO</sub>	100	V
Collector to Emitter Voltage		V <sub>CEO</sub>	100	V
Emitter to Base Voltage		V <sub>EBO</sub>	5	V
IC Collector Current		lc	5	А
Device Dissignation (T 25 )	TO-220		65	W
Power Dissipation ( $T_c=25$ )	TO-126	- P <sub>D</sub> -	40	W
Junction Temperature		TJ	+150	
Storage Temperature		T <sub>STG</sub>	-55 ~ +150	

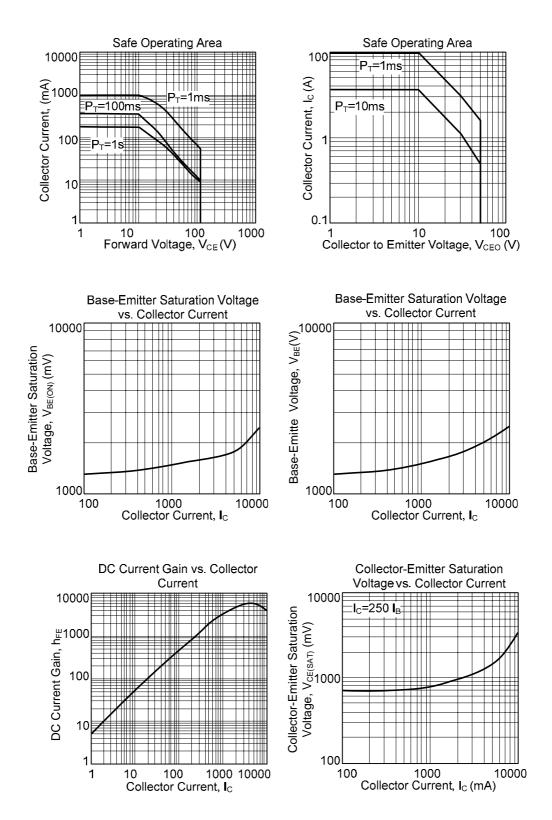
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

#### ■ ELECTRICAL CHARACTERISTICS (Ta=25 )

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



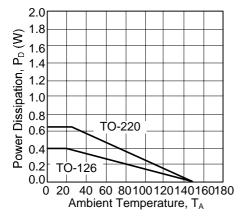
#### TYPICAL CHARACTERISTICS





# TIP122

#### TYPICAL CHARACTERISTICS



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