



TIP127

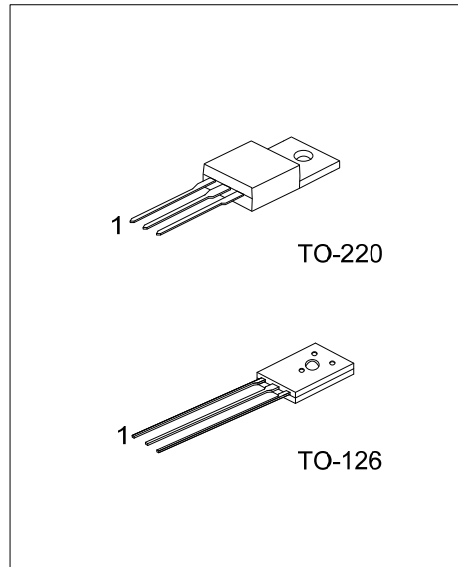
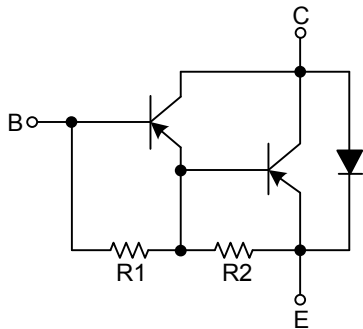
PNP SILICON TRANSISTOR

PNP EPITAXIAL TRANSISTOR

■ DESCRIPTION

The UTC **TIP127** is a PNP epitaxial transistor, designed for use in general purpose amplifier low-speed switching applications.

■ EQUIVALENT TEST ($R_1 \approx 8k\Omega$, $R_2 \approx 0.12k\Omega$)



■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
TIP127L-T60-K	TIP127G-T60-K	TO-126	E	C	B	Bulk
TIP127L-TA3-T	TIP127G-TA3-T	TO-220	B	C	E	Tube

<p>TIP127L-T60-K</p> <p>(1)Packing Type (2)Package Type (3)Lead Plating</p>	<p>(1) K: Bulk, T: Tube (2) T60: TO-126, TA3: TO-220 (3) G: Halogen Free, L: Lead Free</p>
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■ ABSOLUTE MAXIMUM RATING ($T_a = 25^\circ\text{C}$, unless otherwise specified)

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
Collector Current		I_C	5	A
Power Dissipation	TO-126	P_D	40	W
	TO-220		65	W
Junction Temperature		T_J	150	$^\circ\text{C}$
Operating Temperature		T_{OPR}	-20 ~ +85	$^\circ\text{C}$
Storage Temperature		T_{STG}	-55 ~ +150	$^\circ\text{C}$

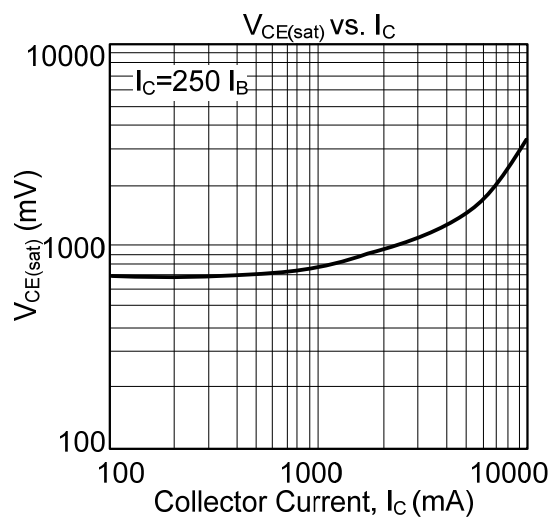
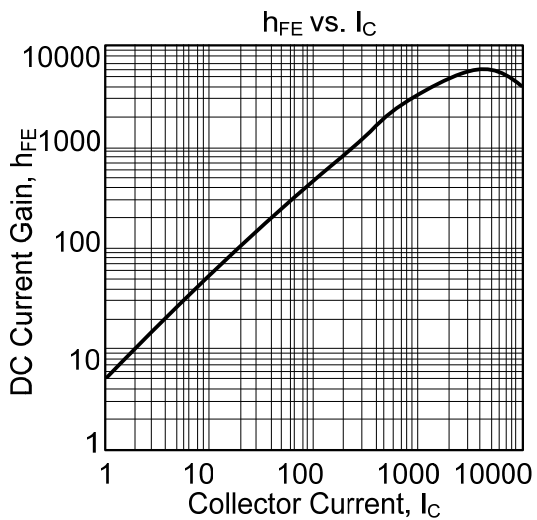
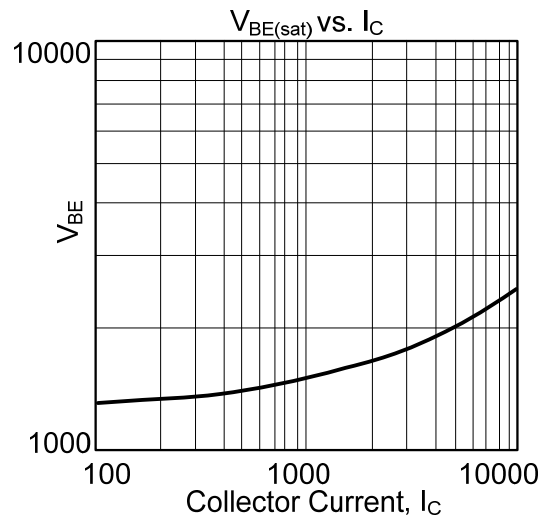
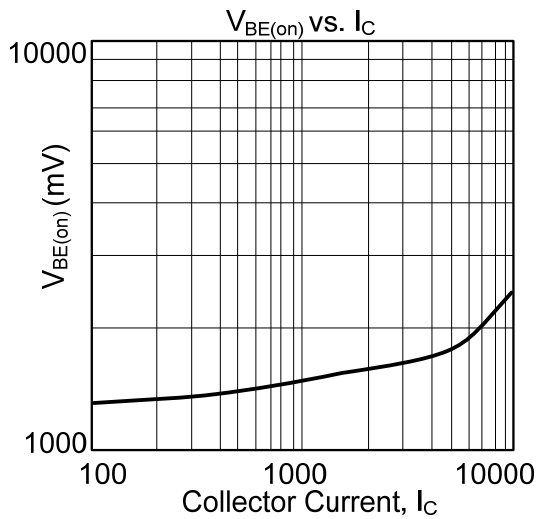
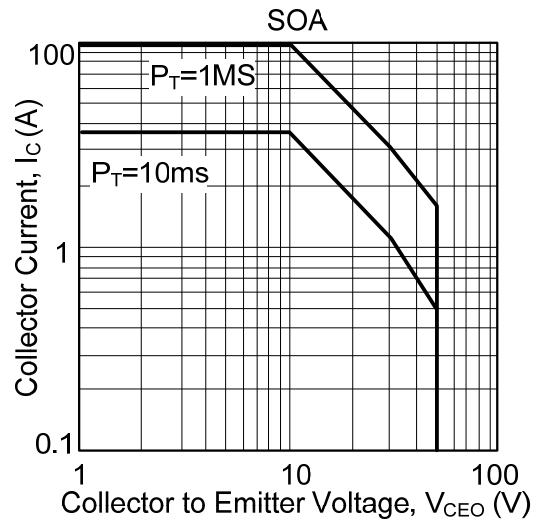
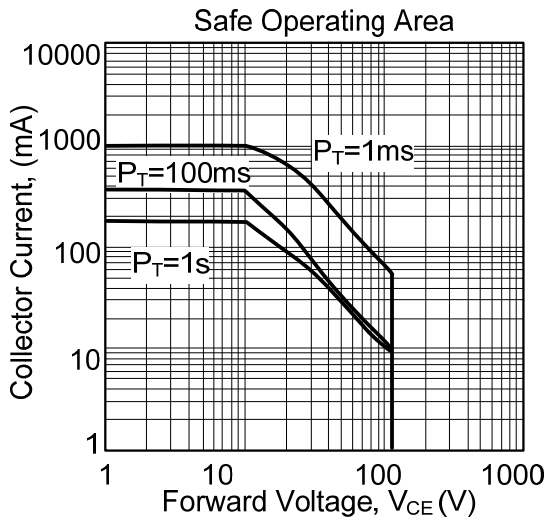
Note: Absolute maximum ratings are the values beyond which the device will be damaged permanently.

Absolute maximum ratings are only stress ratings and it is not implied for functional device operation.

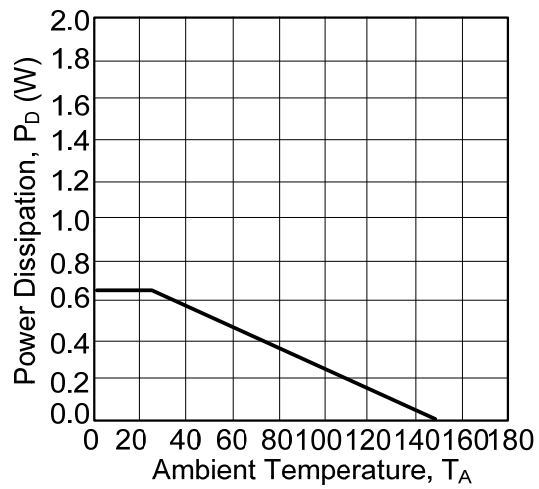
■ ELECTRICAL CHARACTERISTICS ($T_a = 25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C = 100\text{mA}$	100			V
Collector Cut-Off Current	I_{CBO}	$V_{CB} = 100\text{V}$			200	μA
Collector-Cut-Off Current	I_{CEO}	$V_{CE} = 50\text{V}$			500	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB} = 5\text{V}$			2	mA
Collector-Emitter Saturation Voltage	$V_{CE(SAT)1}$	$I_C = 3\text{A}$, $I_B = 12\text{mA}$			2	V
Collector-Emitter Saturation Voltage	$V_{CE(SAT)2}$	$I_C = 5\text{A}$, $I_B = 20\text{mA}$			4	V
Base-Emitter Saturation Voltage	$V_{BE(ON)}$	$V_{CE} = 3\text{V}$, $I_C = 3\text{A}$			2.5	V
DC Current Gain	h_{FE}	$I_C = 500\text{mA}$, $V_{CE} = 3\text{V}$ $I_C = 3\text{A}$, $V_{CE} = 3\text{V}$	1			K

■ TYPICAL CHARACTERISTICS



■ TYPICAL CHARACTERISTICS(Cont.)



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