



# TIP127

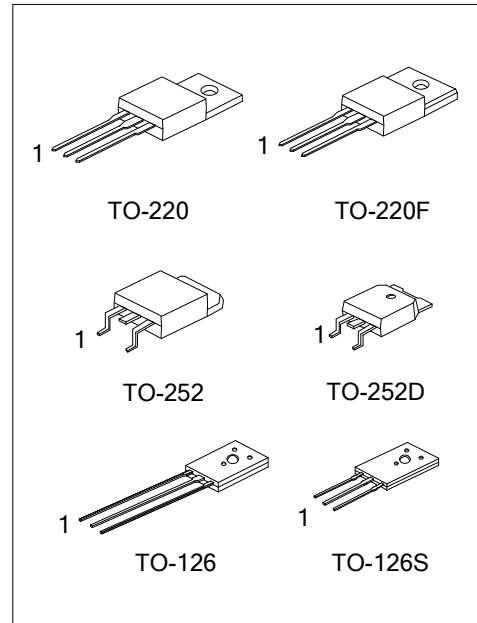
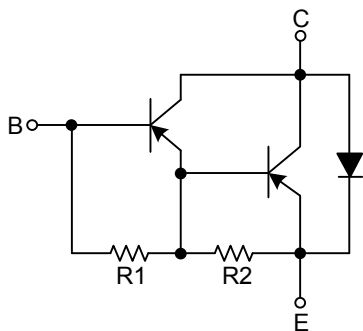
## PNP SILICON TRANSISTOR

### 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 ( $R_1 \approx 4k\Omega$ ,  $R_2 \approx 0.12k\Omega$ )



■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
TIP127L-TA3-T	TIP127G-TA3-T	TO-220	B	C	E	Tube
TIP127L-TF3-T	TIP127G-TF3-T	TO-220F	B	C	E	Tube
TIP127L-TN3-T	TIP127G-TN3-T	TO-252	B	C	E	Tape Reel
TIP127L-TND-R	TIP127G-TND-R	TO-252D	B	C	E	Tape Reel
TIP127L-T60-K	TIP127G-T60-K	TO-126	E	C	B	Bulk
TIP127L-T6S-K	TIP127G-T6S-K	TO-126S	E	C	B	Bulk

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

<p>TIP127G-TA3-T</p> <p>(1)Packing Type (2)Package Type (3)Green Package</p>	<p>(1) K: Bulk, T: Tube (2) TA3: TO-220, TF3: TO-220F, TN3: TO-252 TND: TO-252D, T60: TO-126, T6S: TO-126S (3) G: Halogen Free and Lead Free, L: Lead Free</p>
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■ MARKING

TO-220 / TO-220F / TO-252 / TO-252D	TO-126 / TO-126S

■ ABSOLUTE MAXIMUM RATING ( $T_C=25^{\circ}\text{C}$ , unless otherwise specified)

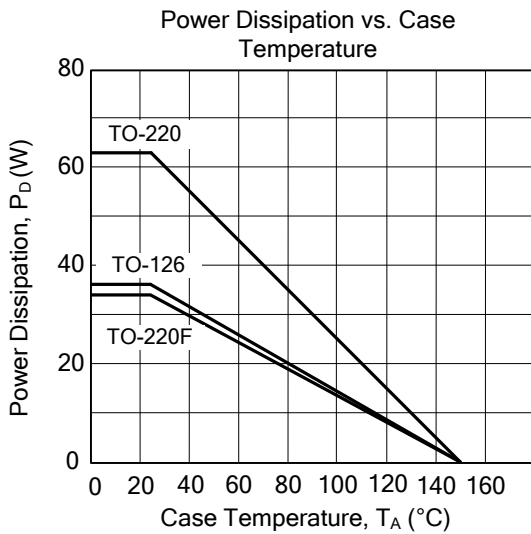
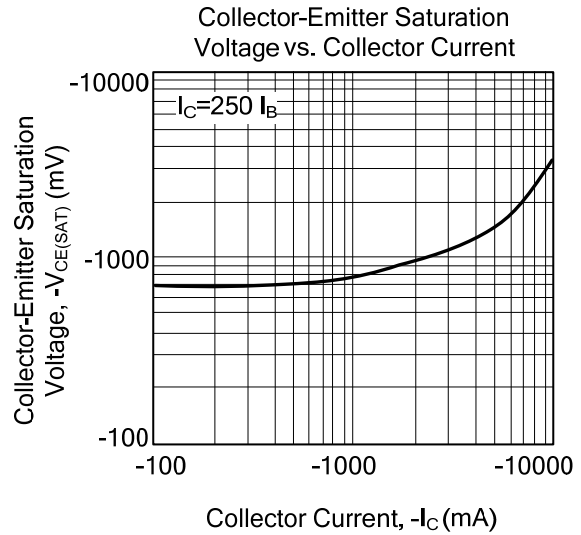
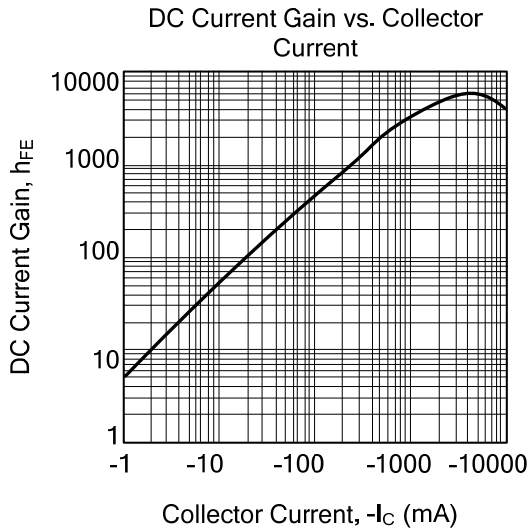
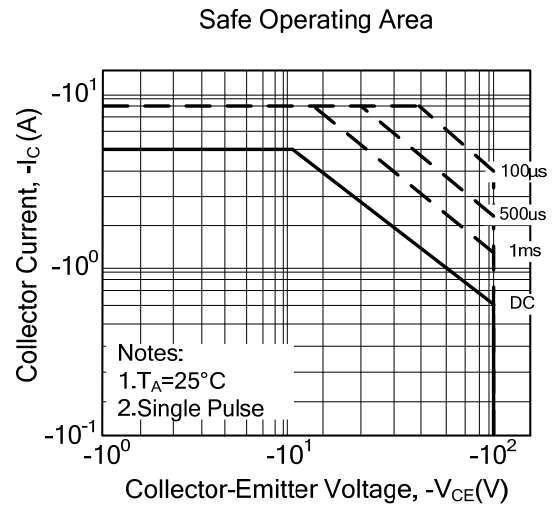
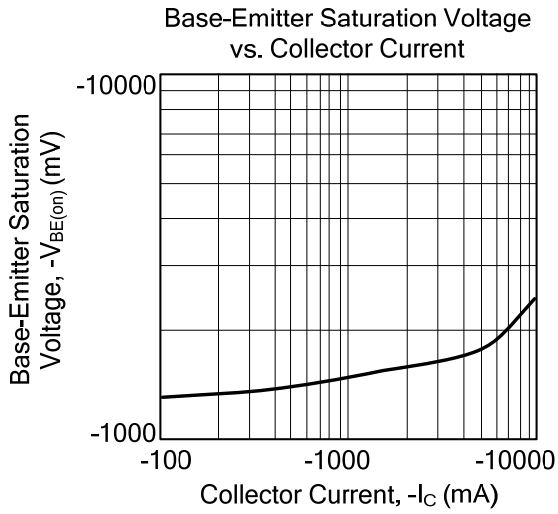
PARAMETER		SYMBOL	RATINGS	UNIT
Collector to Base Voltage		$V_{CBO}$	-100	V
Collector to Emitter Voltage		$V_{CEO}$	-100	V
Emitter to Base Voltage		$V_{EBO}$	-5	V
Collector Current	DC	$I_C$	-5	A
	Pulse	$I_{CP}$	-8	A
Power Dissipation	TO-220	$P_D$	65	W
	TO-220F		34	W
	TO-252/TO-252D		38	W
	TO-126/TO-126S		36	W
Junction Temperature		$T_J$	+150	$^{\circ}\text{C}$
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 ( $T_C=25^{\circ}\text{C}$ , unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_C=-10\text{mA}$	-100			V
Collector Cut-Off Current	$I_{CBO}$	$V_{CB}=-100\text{V}$			-200	$\mu\text{A}$
Collector-Cut-Off Current	$I_{CEO}$	$V_{CE}=-50\text{V}$			-500	$\mu\text{A}$
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB}=-5\text{V}$		-1.1	-1.5	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	$h_{FE}$	$V_{CE}=-3\text{V}, I_C=-500\text{mA}$	1000			
		$V_{CE}=-3\text{V}, I_C=-3\text{A}$	1000			

### TYPICAL CHARACTERISTICS



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