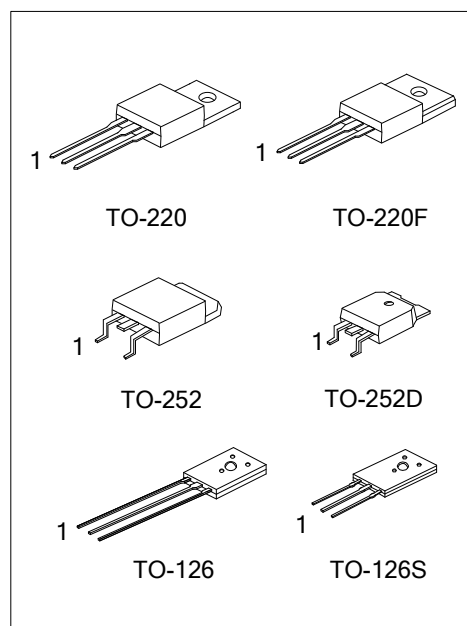
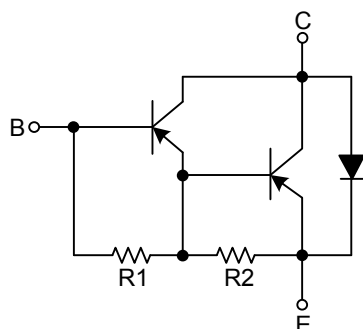


**TIP127****PNP SILICON TRANSISTOR****PNP EPITAXIAL TRANSISTOR****DESCRIPTION**

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-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

TIP127G-TA3-T (1)Packing Type (2)Package Type (3)Green Package	(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
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MARKING

TO-220 / TO-220F / TO-252 / TO-252D	TO-126 / TO-126S
UTC TIP127 L: Lead Free G: Halogen Free Data Code Lot Code	UTC TIP127 Data Code L: Lead Free G: Halogen Free 1

■ **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	$^\circ\text{C}$

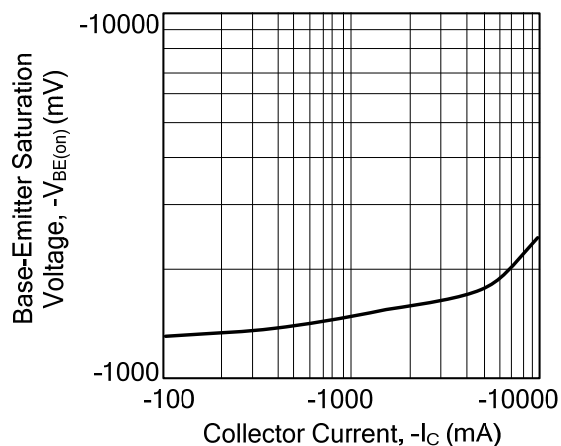
Note: Absolute maximum ratings are the values beyond which the device will be damaged permanently.
Absolute maximum ratings are only stress ratings and it is not implied for functional device operation.

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

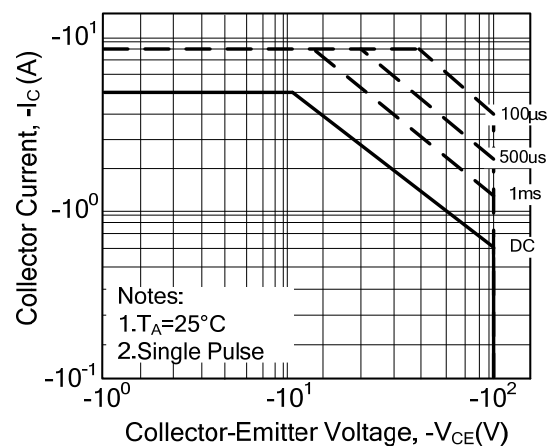
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C = -10\text{mA}$	-100			V
Collector Cut-Off Current	I_{CBO}	$V_{CB} = -100\text{V}$			-200	μA
Collector-Cut-Off Current	I_{CEO}	$V_{CE} = -50\text{V}$			-500	μA
Emitter Cut-Off Current	I_{EBO}	$V_{EB} =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

■ TYPICAL CHARACTERISTICS

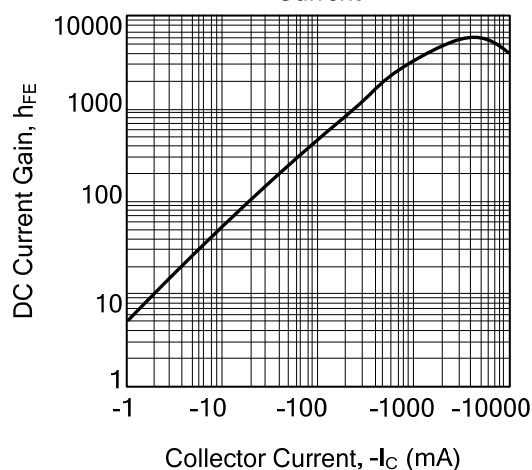
Base-Emitter Saturation Voltage
vs. Collector Current



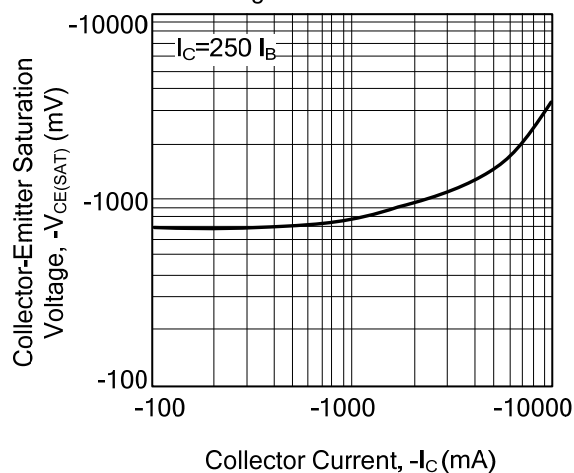
Safe Operating Area



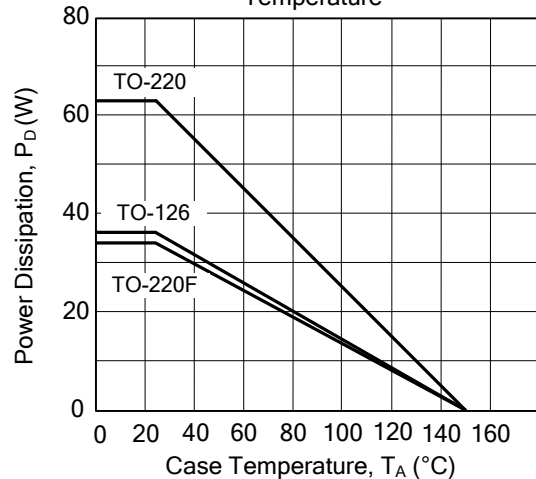
DC Current Gain vs. Collector
Current



Collector-Emitter Saturation
Voltage vs. Collector Current



Power Dissipation vs. Case
Temperature



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