



## TIP32C

## PNP SILICON TRANSISTOR

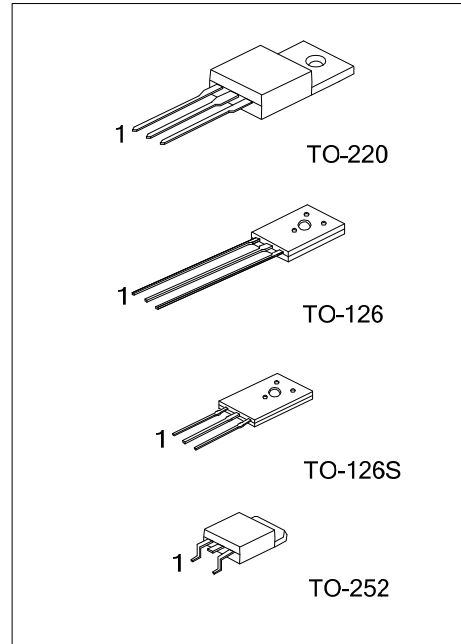
### PNP EXPITAXIAL PLANAR TRANSISTOR

#### DESCRIPTION

The UTC **TIP32C** is a PNP epitaxial planar transistor, designed for using in general purpose amplifier and switching applications.

#### FEATURES

\* Complement to TIP31C



#### ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
TIP32CL-TA3-T	TIP32CG-TA3-T	TO-220	B	C	E	Tube
TIP32CL-T60-K	TIP32CG-T60-K	TO-126	B	C	E	Bulk
TIP32CL-T60-A-K	TIP32CG-T60-A-K	TO-126	E	C	B	Bulk
TIP32CL-T6S-K	TIP32CG-T6S-K	TO-126S	B	C	E	Bulk
TIP32CL-TN3-R	TIP32CG-TN3-R	TO-252	B	C	E	Tape Reel

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

<p>TIP32CL-T60-A-K</p> <p>(1)Packing Type (2)Pin Assignment (3)Package Type (4)Green Package</p>	<p>(1) T: Tube, B: Bulk, R: Tape Reel (2) Refer to Pin Assignment (3) TA3: TO-220, T60: TO-126, T6S: TO-126S TN3: TO-252 (4) L: Lead Free, G: Halogen Free and Lead Free</p>
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#### MARKING

TO-220 / TO-252	TO-126 / TO-126S
<p>UTC TIP32C □ □ □ □ □ □ □ □ □</p> <p>Lot Code ← □ □ □ □ □ □ □ □ → Data Code</p> <p>1</p> <p>L: Lead Free G: Halogen Free</p>	<p>UTC □ □ □ □ □ □ □ □</p> <p>TIP32C □ □ □ □ □ □ □ □</p> <p>1</p> <p>Data Code L: Lead Free G: Halogen Free</p>

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

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	$V_{CBO}$	-100	V
Emitter-Base Voltage	$V_{EBO}$	-5	V
Collector Current	DC	$I_C$	-3
	PULSE	$I_{CM}$	-5
Base Current	$I_B$	-1	A
Power Dissipation	TO-220	$P_D$	2
	TO-126S/TO-126		1.25
	TO-252		1
Junction Temperature	$T_J$	+150	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-40 ~ +150	$^\circ\text{C}$

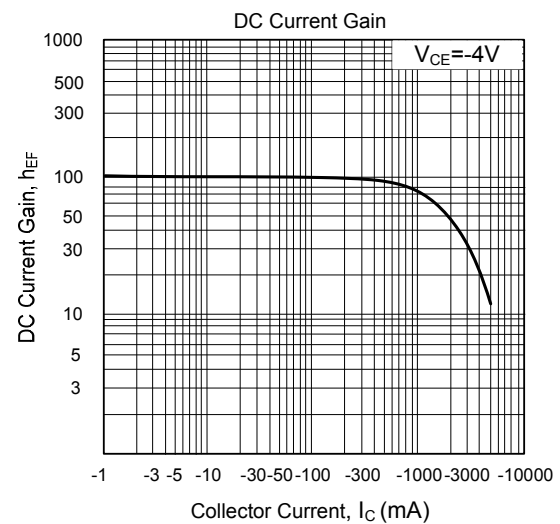
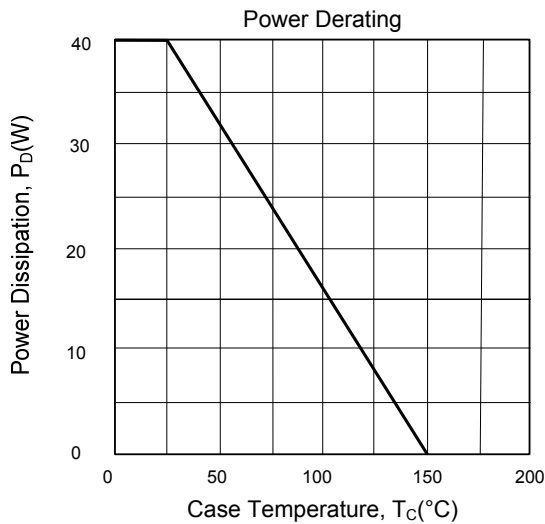
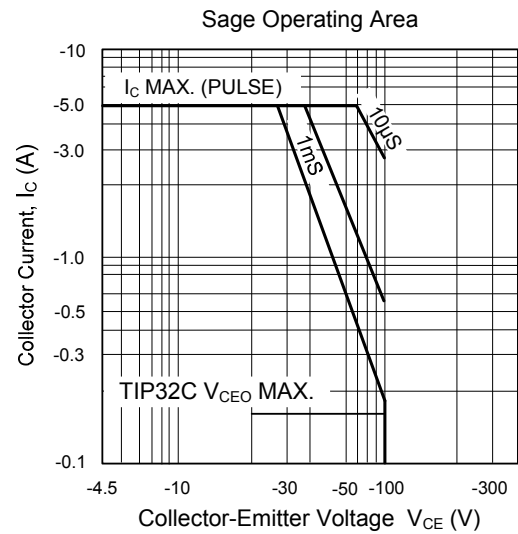
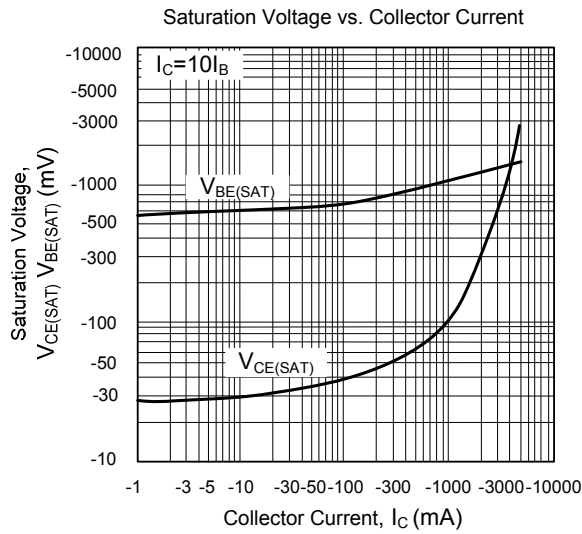
Note: Absolute maximum ratings are those values beyond which the device could be permanently damaged. Absolute maximum ratings are stress ratings only and functional device operation is not implied.

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Emitter Sustaining Voltage (Note)	$BV_{CEO}$	$I_C=-30\text{mA}, I_B=0$	-100			V
Collector Cutoff Current	$I_{CES}$	$V_{CE}=-100\text{V}, V_{BE}=0$			-200	$\mu\text{A}$
Collector Cutoff Current	$I_{CEO}$	$V_{CE}=-60\text{V}, I_B=0$			-0.3	mA
Emitter Cutoff current	$I_{EBO}$	$V_{BE}=-5\text{V}, I_C=0$			-1	mA
Collector-Emitter Saturation Voltage (Note)	$V_{CE(SAT)}$	$I_C=-3\text{A}, I_B=-375\text{mA}$			-1.2	V
Base-Emitter On Voltage*	$V_{BE(ON)}$	$I_C=-3\text{A}, V_{CE}=-4\text{V}$			-1.8	V
DC Current Gain (Note)	$h_{FE}$	$I_C=-1\text{A}, V_{CE}=-4\text{V}$	25			
		$I_C=-3\text{A}, V_{CE}=-4\text{V}$	10		50	
Current Gain Bandwidth Product	$f_T$	$I_C=-0.5\text{A}, V_{CE}=-10\text{V}, f=1\text{MHz}$	3			MHz

Note: Pulse Test:  $P_W \leq 300\mu\text{s}$ , Duty Cycle  $\leq 2\%$ .

## TYPICAL CHARACTERISTICS



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