



TIP35C

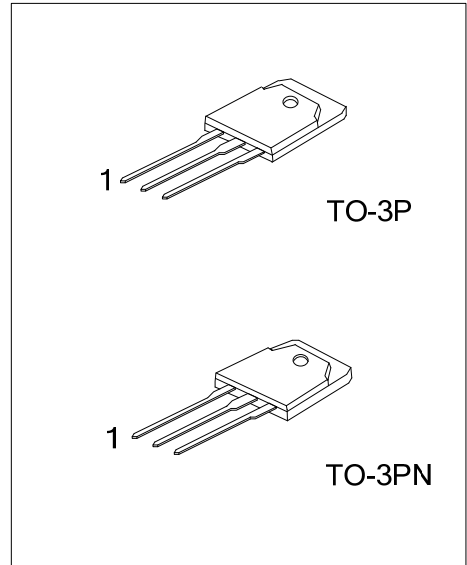
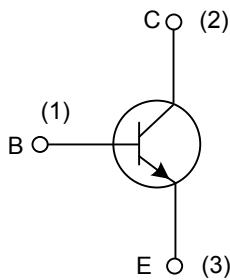
NPN SILICON TRANSISTOR

HIGH POWER TRANSISTORS

DESCRIPTION

The UTC **TIP35C** is a NPN Expitaxial-Base transistor, designed for using in general purpose amplifier and switching applications. Complement to TIP36C.

INTERNAL SCHEMATIC DIAGRAM



ORDERING INFORMATION

Order Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
TIP35CL-x-T3P-T	TIP35CG-x-T3P-T	TO-3P	B	C	E	Tube
TIP35CL-x-T3N-T	TIP35CG-x-T3N-T	TO-3PN	B	C	E	Tube

<p>TIP35CL-x-T3P-T</p>	<p>(1) T: Tube (2) T3P: TO-3P, T3N: TO-3PN (3) refer to Classification of h_{FE1} (4) L: Lead Free, G: Halogen Free</p>
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■ ABSOLUTE MAXIMUM RATINGS

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage ($I_E = 0$)	V_{CBO}	100	V
Collector-Emitter Voltage ($I_B = 0$)	V_{CEO}	100	V
Emitter-Base Voltage ($I_C = 0$)	V_{EBO}	5	V
Collector Current	I_C	25	A
Collector Peak Current	I_{CM}	50	A
Base Current	I_B	5	A
Total Dissipation ($T_C = 25^\circ\text{C}$)	P_D	125	W
Junction Temperature	T_J	+150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-65 ~ +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.

■ THERMAL DATA

PARAMETER	SYMBOL	MIN	TYP	MAX	UNIT
Thermal Resistance Junction-Case	θ_{JC}			1	$^\circ\text{C/W}$

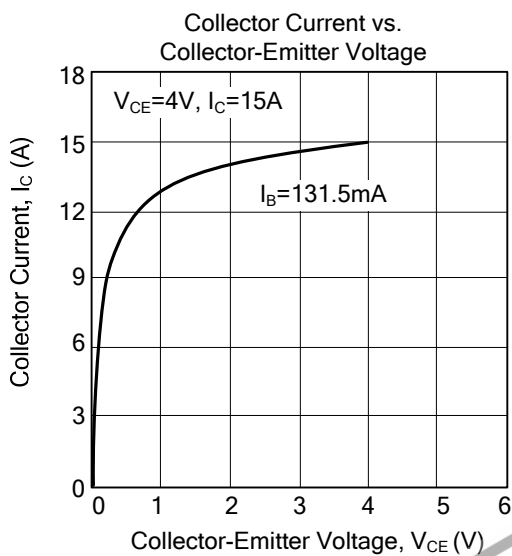
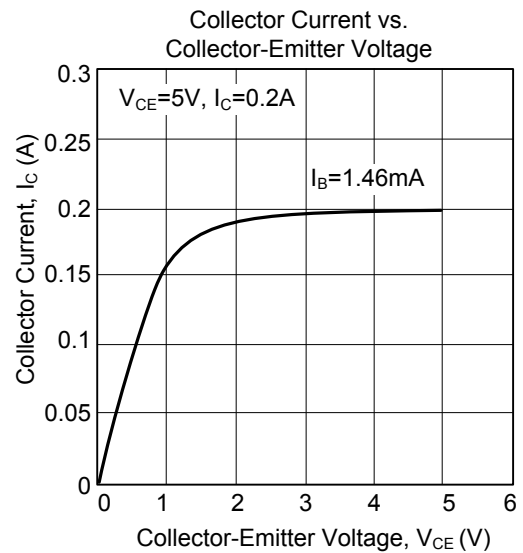
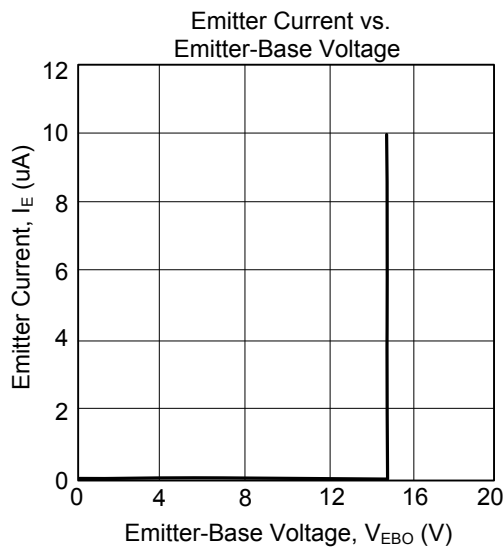
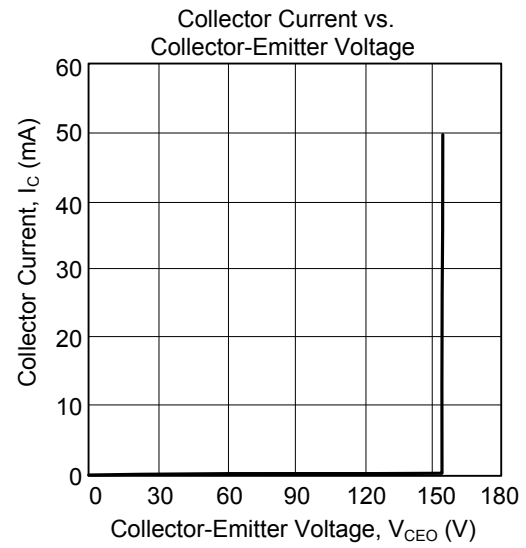
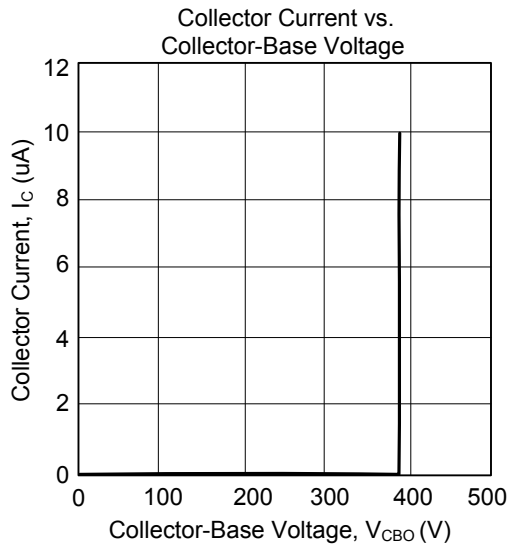
■ ELECTRICAL CHARACTERISTICS ($T_C = 25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cut-off Current ($I_E = 0$)	I_{CBO}	$V_{CB} = 100\text{ V}$			10	μA
Emitter Cut-off Current ($I_C = 0$)	I_{EBO}	$V_{EB} = 5\text{ V}$			10	μA
Collector-Emitter Sustaining Voltage ($I_B = 0$)	$V_{(BR)CEO}$	$I_C = 50\text{ mA}$	100			V
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_B = 1.5\text{ A}, I_C = 15\text{ A}$			1.8	V
		$I_B = 5\text{ A}, I_C = 25\text{ A}$			4	V
Base-Emitter Voltage	$V_{BE(ON)}$	$V_{CE} = 5\text{ V}, I_C = 5\text{ A}$			1.5	V
DC Current Gain	h_{FE1}	$V_{CE} = 5\text{ V}, I_C = 1.5\text{ A}$	55		160	
	h_{FE2}	$V_{CE} = 4\text{ V}, I_C = 15\text{ A}$	15			
Transition Frequency	f_T	$V_{CE} = 5\text{ V}, I_C = 1\text{ A}$	3			MHz

■ CLASSIFICATION OF h_{FE1}

RANK	R	O
RANGE	55~110	80~160

■ TYPICAL CHARACTERISTICS



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