



2SC3834

NPN SILICON TRANSISTOR

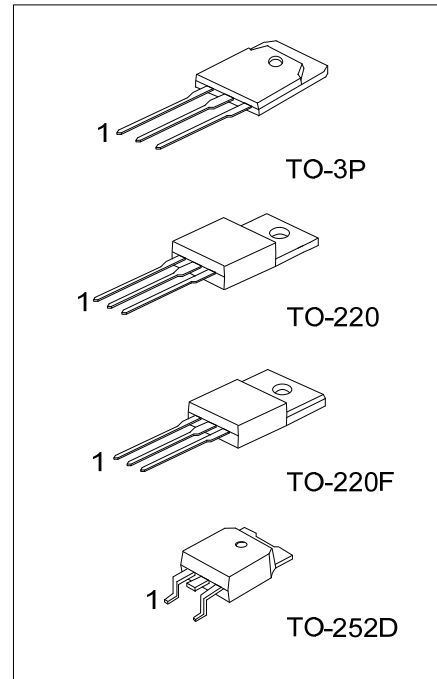
SWITCH NPN TRANSISTOR

■ DESCRIPTION

The UTC **2SC3834** is an epitaxial planar type NPN silicon transistor.

■ FEATURES

* Humidifier, DC-DC converter, and general purpose



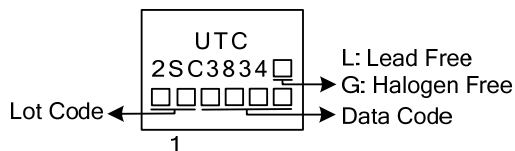
■ ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free Plating	Halogen Free		1	2	3	
2SC3834L-TA3-T	2SC3834G-TA3-T	TO-220	B	C	E	Tube
2SC3834L-TF3-T	2SC3834G-TF3-T	TO-220F	B	C	E	Tube
2SC3834L-TND-R	2SC3834G-TND-R	TO-252D	B	C	E	Tape Reel
2SC3834L-T3P-T	2SC3834G-T3P-T	TO-3P	B	C	E	Tube

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

<p>2SC3834G-TA3-T</p> <p>(1) Packing Type (2) Package Type (3) Green Package</p>	<p>(1) T: Tube (2) TA3: TO-220, TF3: TO-220F, TND: TO-252, T3P: TO-3P (3) G: Halogen Free and Lead Free, L: Lead Free</p>
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■ MARKING



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

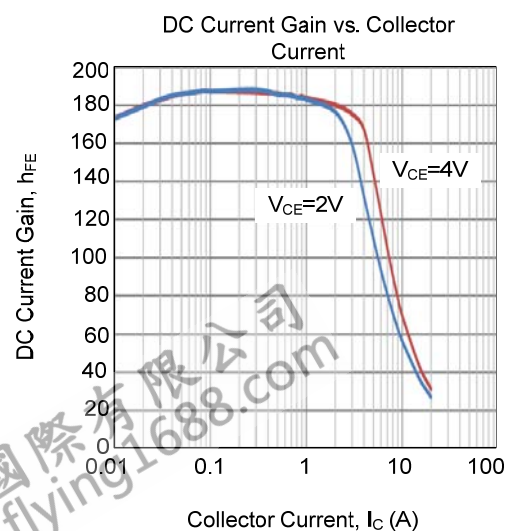
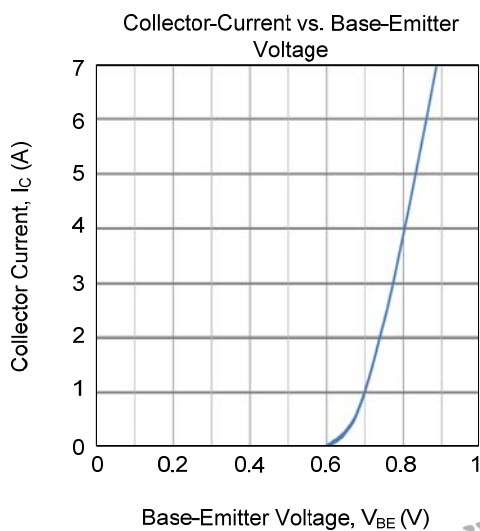
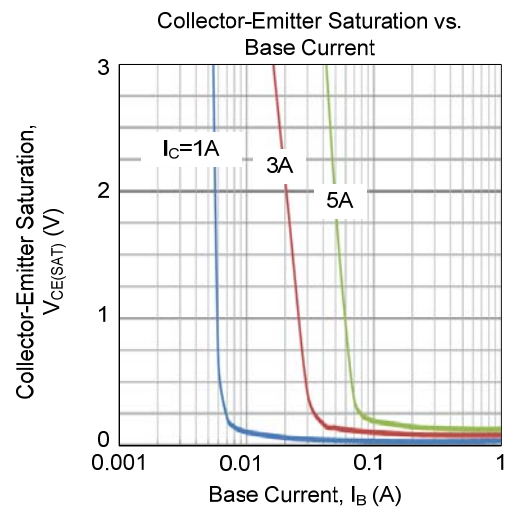
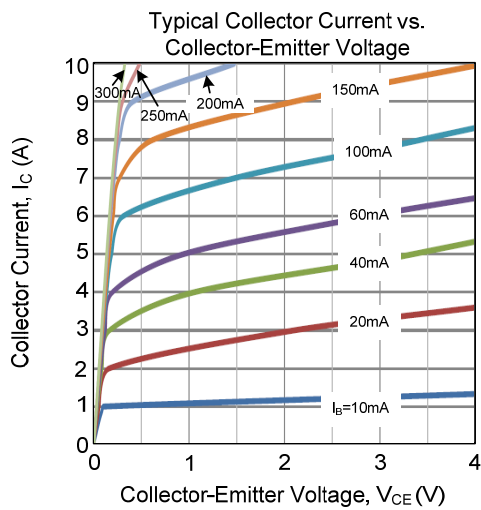
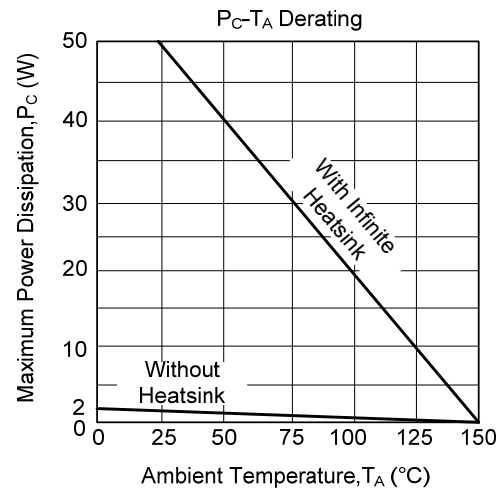
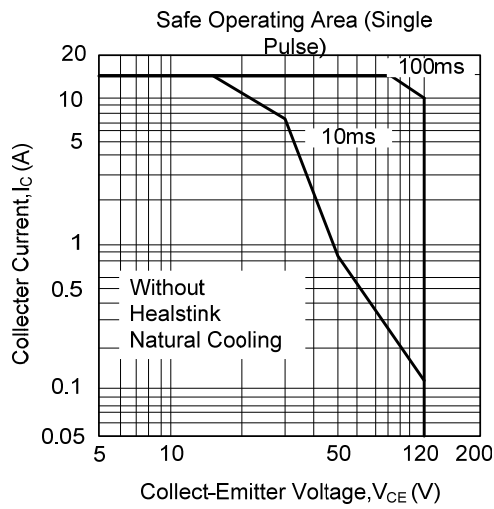
PARAMETER		SYMBOL	RATINGS	UNIT
Collector-Base Voltage		V_{CB0}	200	V
Collector-emitter voltage		V_{CEO}	120	V
Emitter-Base Voltage		V_{EBO}	8	V
Collector Current (Pulse)		I_C	7	A
Base Current		I_B	3	A
Collector Dissipation ($T_c=25^\circ\text{C}$)	TO-220	P_C	60	W
	TO-220F		27	W
	TO-252D		30	W
	TO-3P		65	W
Junction Temperature		T_J	+150	$^\circ\text{C}$
Storage Temperature		T_{STG}	-55 ~ +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.

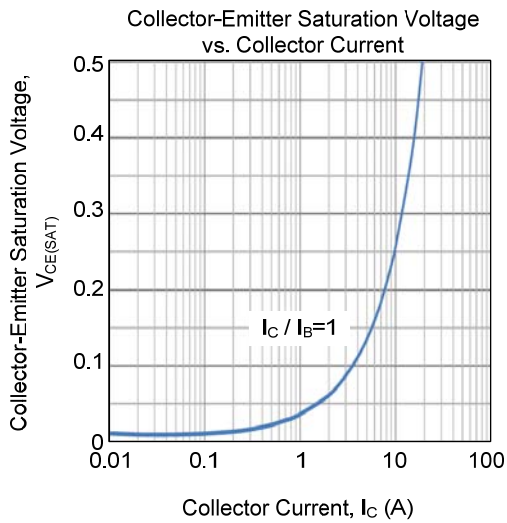
■ ELECTRICAL CHARACTERISTICS ($T_A=25^\circ\text{C}$, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=50\text{mA}$	120			V
Collector Cutoff Current	I_{CBO}	$V_{CB}=200\text{V}, I_E=0\text{A}$			100	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=8\text{V}, I_C=0\text{A}$			100	μA
DC Current Gain (Note)	h_{FE}	$V_{CE}=4\text{V}, I_C=3\text{A}$	70		220	
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C=3\text{A}, I_B=0.3\text{A}$			0.5	V
Base-Emitter Saturation Voltage	$V_{BE(SAT)}$	$I_C=3\text{A}, I_B=0.3\text{A}$			1.2	V
Current Gain Bandwidth Product	f_T	$I_E=-0.5\text{mA}, V_{CE}=12\text{V}, f=100\text{MHz}$		30		MHz
Output Capacitance	C	$V_{CB}=10\text{V}, I_E=0\text{A}, f=1\text{MHz}$		110		pF

TYPICAL CHARACTERISTICS



■ TYPICAL CHARACTERISTICS



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