



2SC1384

NPN SILICON TRANSISTOR

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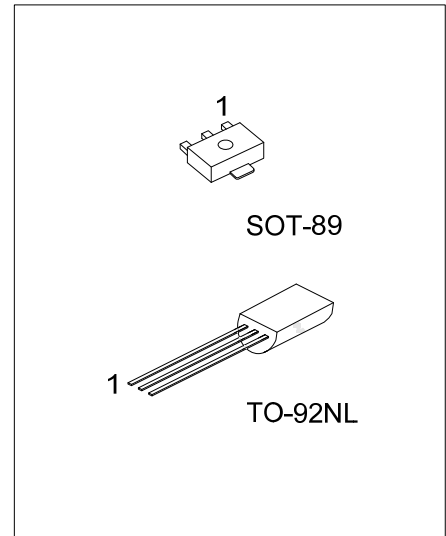
DESCRIPTION

The UTC **2SC1384** is power amplifier and driver.

FEATURES

* Low $V_{CE(SAT)}$

* 2~3W output in complementary pair with 2SA684



Lead-free: 2SC1384L

Halogen-free: 2SC1384G

ORDERING INFORMATION

Ordering Number			Package	Pin Assignment			Packing
Normal	Lead Free Plating	Halogen-Free		1	2	3	
2SC1384-x-AB3-R	2SC1384L-x-AB3-R	2SC1384G-x-AB3-R	SOT-89	B	C	E	Tape Reel
2SC1384-x-T9N-B	2SC1384L-x-T9N-B	2SC1384G-x-T9N-B	TO-92NL	E	C	B	Tape Box
2SC1384-x-T9N-K	2SC1384L-x-T9N-K	2SC1384G-x-T9N-K	TO-92NL	E	C	B	Bulk
2SC1384-x-T9N-R	2SC1384L-x-T9N-R	2SC1384G-x-T9N-R	TO-92NL	E	C	B	Tape Reel

<p>2SC1384L-x-AB3-B</p> <p>(1) Packing Type (2) Package Type (3) Rank (4) Lead Plating</p>	<p>(1) K: Bulk, T: Tube, R: Tape Reel (2) AB3: SOT-89, T9N: TO-92NL (3) x: refer to Classification of h_{FE} (4) G: Halogen Free, L: Lead Free Plating, Blank: Pb/Sn</p>
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■ ABSOLUTE MAXIMUM RATINGS (Ta=25°C, unless otherwise specified)

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	V _{CBO}	60	V
Collector-Emitter Voltage	V _{CEO}	50	V
Emitter-Base Voltage	V _{EBO}	5	V
Peak Collector Current	I _{CP}	1.5	A
Collector Current (DC)	I _C	1	A
Collector Dissipation (Ta=25°C)	P _C	1000	mW
Junction Temperature	T _J	125	°C
Operating Temperature	T _{OPR}	-20 ~ +85	°C
Storage Temperature	T _{STG}	-40 ~ +150	°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.

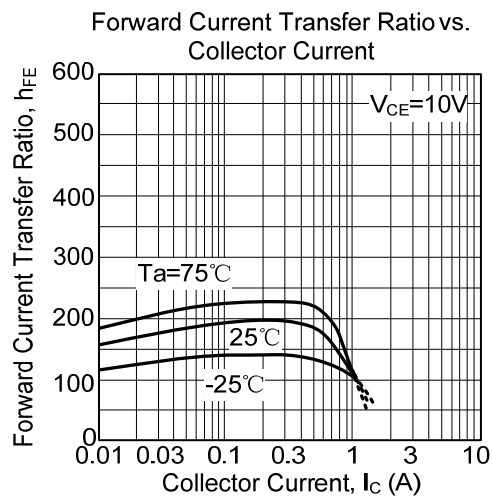
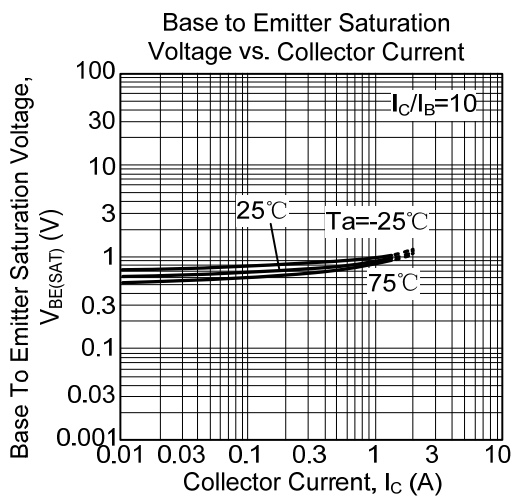
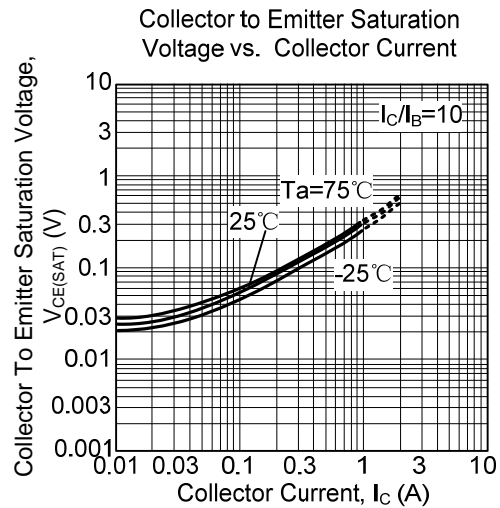
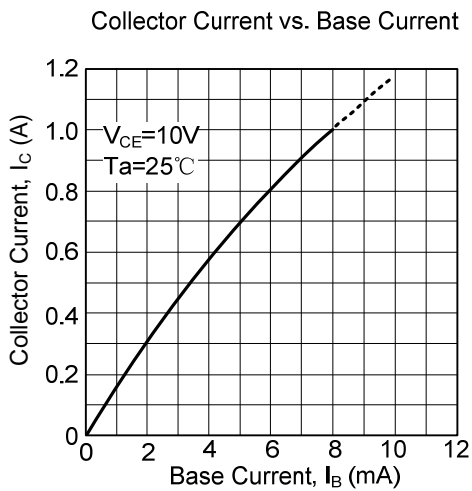
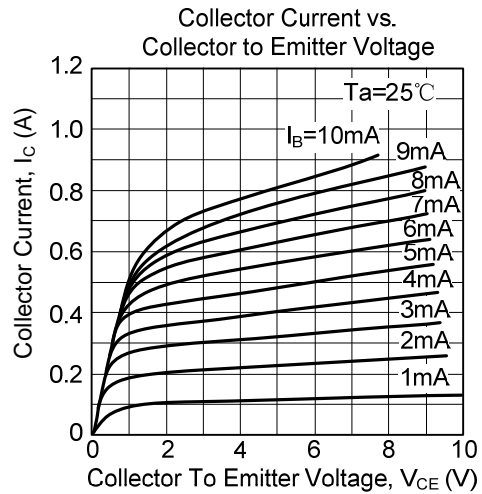
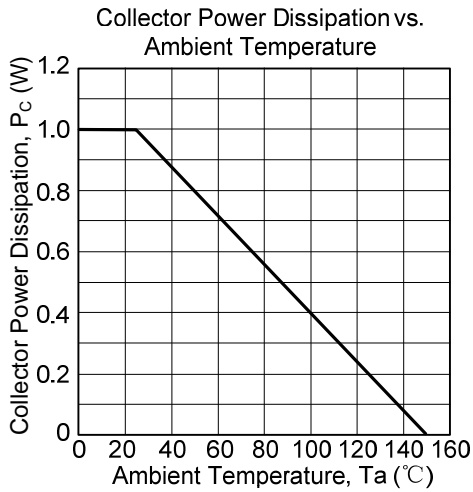
■ ELECTRICAL CHARACTERISTICS (Ta=25°C, unless otherwise specified)

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV _{CBO}	I _C =10μA, I _E =0	60			V
Collector-Emitter Breakdown Voltage	BV _{CEO}	I _C =2mA, I _B =0	50			V
Emitter-Base Breakdown Voltage	BV _{EBO}	I _E =10μA, I _C =0	5			V
Collector Cut-Off Current	I _{CBO}	V _{CB} =20V, I _E =0			0.1	μA
DC Current Gain	h _{FE1}	V _{CE} =10V, I _C =500mA	85	160	340	
	h _{FE2}	V _{CE} =5V, I _B =1A	50	100		
Collector-Emitter Saturation Voltage	V _{CE(SAT)}	I _C =0.5A, I _B =50mA		0.2	0.4	V
Base-Emitter Saturation Voltage	V _{BE(SAT)}	I _C =0.5A, I _B =50mA		0.85	1.2	V
Current Gain Bandwidth Product	f _T	V _{CE} =10V, I _B =50mA		200		MHz
Output Capacitance	C _{ob}	V _{CB} =10V, I _E =0, f=1MHz		11	20	pF

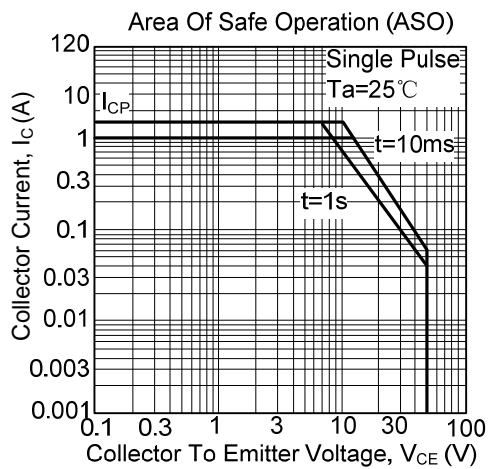
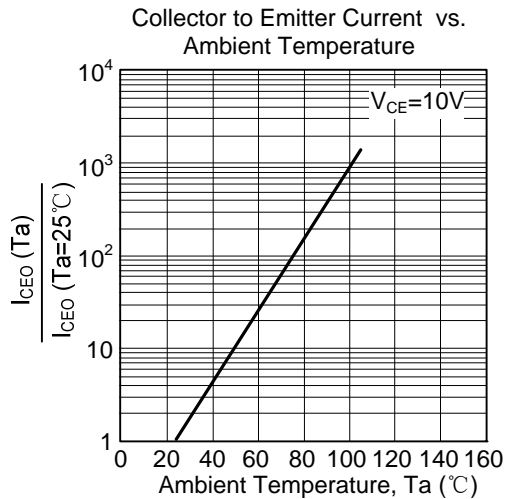
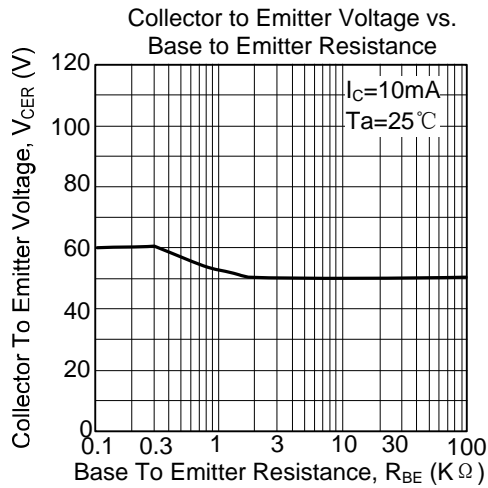
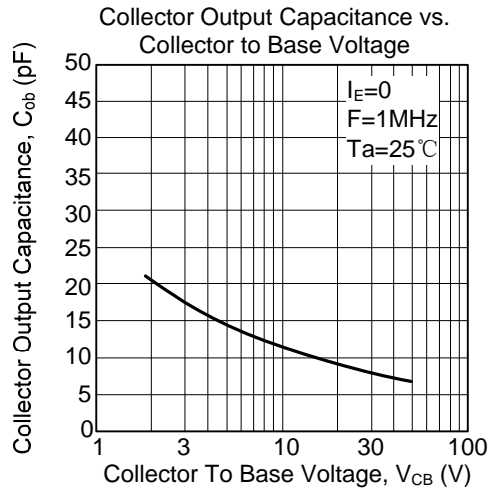
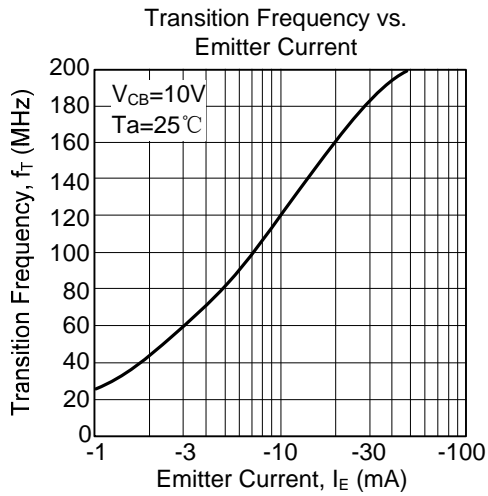
■ CLASSIFICATION OF h_{FE}

RANK	Q	R	S
RANGE	85-170	120-240	170-340

TYPICAL CHARACTERISTICS



■ TYPICAL CHARACTERISTICS(Cont.)



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