



2SC4672

NPN SILICON TRANSISTOR

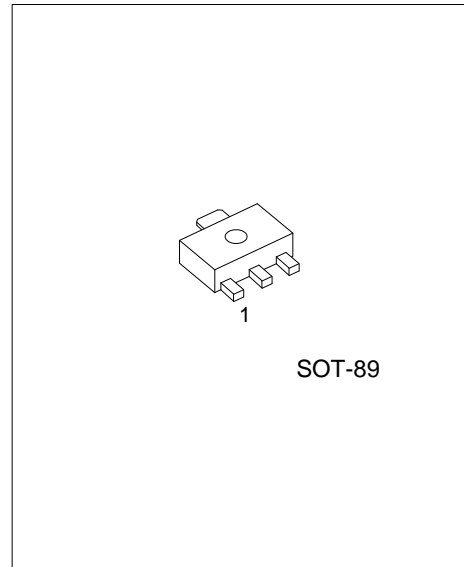
LOW FREQUENCY TRANSISTOR

DESCRIPTION

The UTC **2SC4672** is a low frequency transistor. Excellent DC current gain characteristics.

FEATURES

- *Low Saturation Voltage, Typically $V_{CE(SAT)}=0.1V$ at $I_C / I_B=1A / 50mA$
- *Excellent DC Current Gain Characteristics



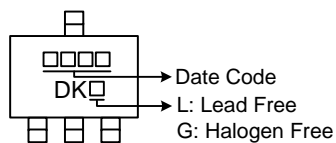
ORDERING INFORMATION

Order Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SC4672L-x-AB3-R	2SC4672G-x-AB3-R	SOT-89	B	C	E	Tape Reel

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

<p>2SC4672G-x-AB3-R</p>	<p>(1) R: Tape Reel (2) AB3: SOT-89 (3) x: refer to Classification of h_{FE} (4) G: Halogen Free and Lead Free, L: Lead Free</p>
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MARKING



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

PARAMETER	SYMBOL	RATINGS	UNIT
Collector to Base Voltage	V_{CBO}	60	V
Collector to Emitter Voltage	V_{CEO}	50	V
Emitter to Base Voltage	V_{EBO}	6	V
Collector Current	I_C	3	A
Collector Current (Pulse) (Note 2)	I_{CP}	6	A
Collector Dissipation	P_C	0.9 (Note 3)	W
Junction Temperature	T_J	+150	$^\circ\text{C}$
Storage Temperature	T_{STG}	-40 ~ +150	$^\circ\text{C}$

Notes: 1. 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.

2. Single pulse, $P_W=10\text{ms}$.

3. Device mounted on FR-4 PCB with minimum recommended pad layout. (25x20x0.7mm)

■ **THERMAL DATA**

PARAMETER	SYMBOL	RATINGS	UNIT
Junction to Ambient	θ_{JA}	250	$^\circ\text{C/W}$
Junction to Case	θ_{JC}	40	$^\circ\text{C/W}$

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

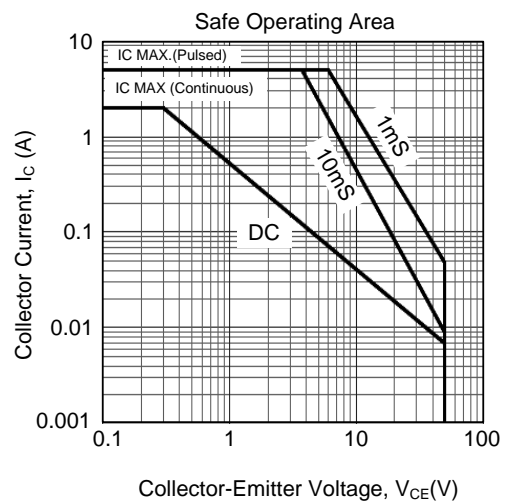
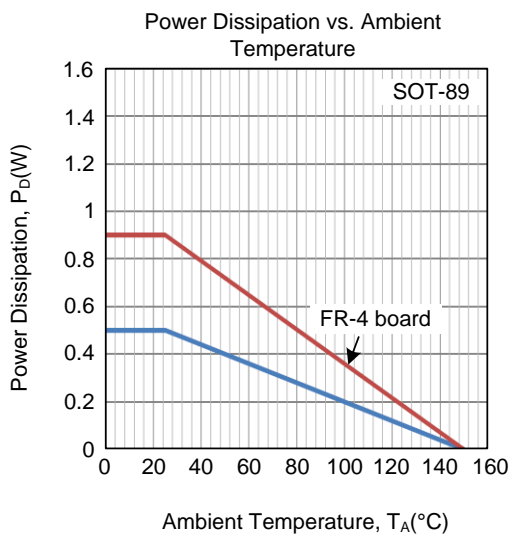
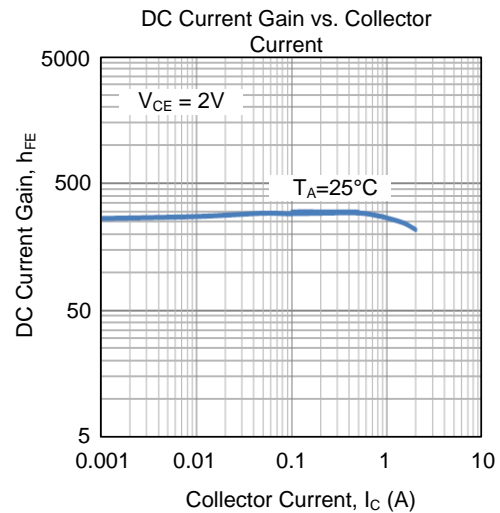
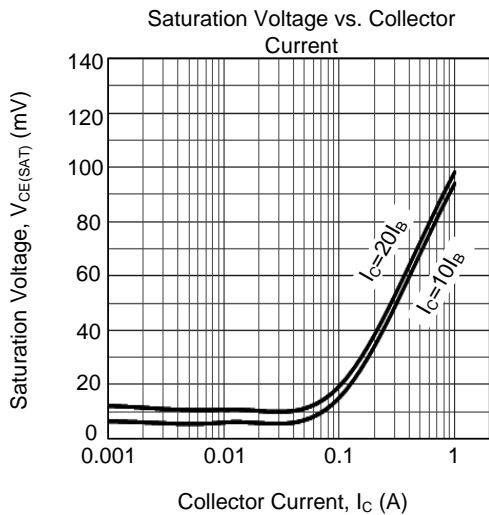
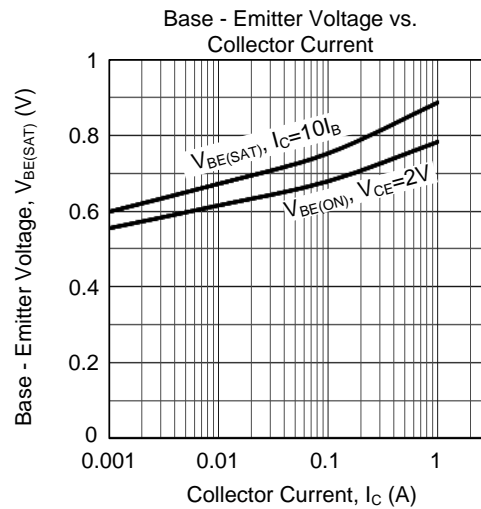
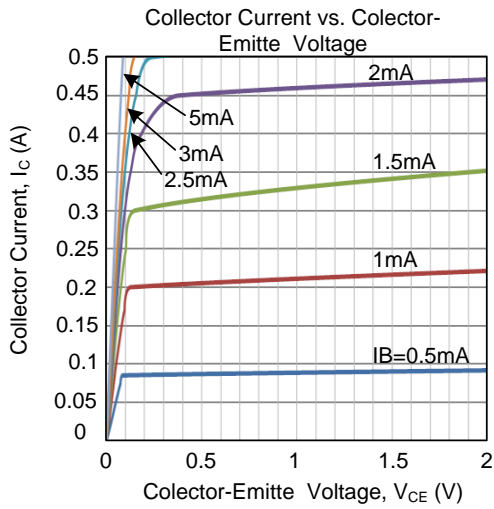
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	BV_{CBO}	$I_C=50\mu\text{A}$	60			V
Collector-Emitter Breakdown Voltage	BV_{CEO}	$I_C=1\text{mA}$	50			V
Emitter-Base Breakdown Voltage	BV_{EBO}	$I_E=50\mu\text{A}$	6			V
Collector Cutoff Current	I_{CBO}	$V_{CB}=60\text{V}$			0.1	μA
Emitter Cutoff Current	I_{EBO}	$V_{EB}=5\text{V}$			0.1	μA
Base Emitter On Voltage	$V_{BE(ON)}$	$V_{CE}=2\text{V}, I_C=1\text{A}$	0.5	0.77	1.0	V
Base-Emitter Saturation Voltage	$V_{BE(SAT)}$	$I_C=1\text{A}, I_B=50\text{mA}$	0.6	0.85	1.1	V
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C/I_B=1\text{A}/50\text{mA}$ (Note)		0.1	0.35	V
DC Current Transfer Ratio	h_{FE}	$V_{CE}=2\text{V}, I_C=0.5\text{A}$ (Note)	120		400	
Transition Frequency	f_T	$V_{CE}=2\text{V}, I_E=-0.5\text{A}, f=100\text{MHz}$		210		MHz
Output Capacitance	C_{OB}	$V_{CB}=10\text{V}, I_E=0\text{A}, f=1\text{MHz}$		25		pF

Note : Measured using pulse current.

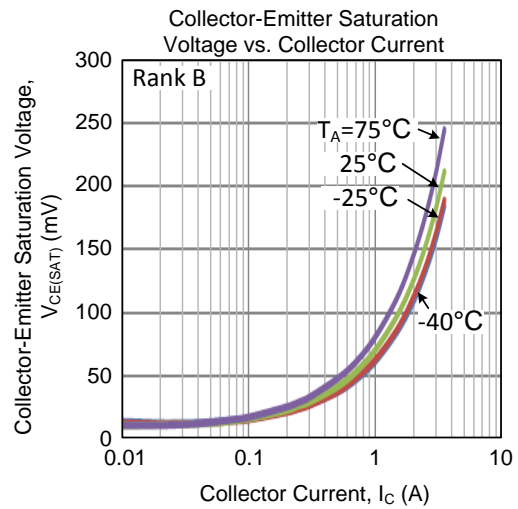
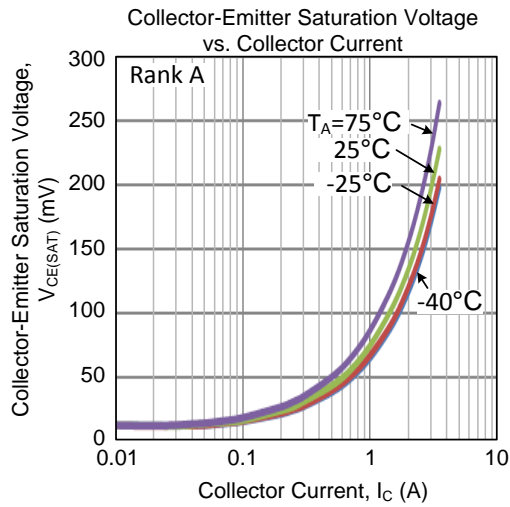
■ **CLASSIFICATION OF h_{FE}**

RANK	A	B
RANGE	120 ~ 240	200 ~ 400

■ TYPICAL CHARACTERISTICS



■ TYPICAL CHARACTERISTICS



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