



# 2SC4672

## NPN SILICON TRANSISTOR

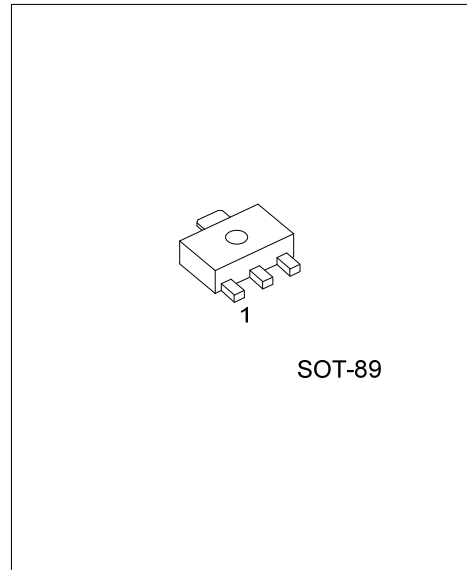
### LOW FREQUENCY TRANSISTOR (50V, 2A)

#### 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



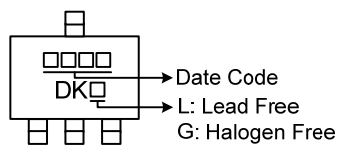
#### ORDERING INFORMATION

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</p> <p>(2) AB3: SOT-89</p> <p>(3) x: refer to Classification of <math>h_{FE}</math></p> <p>(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	$I_C$	2	A
Collector Current (Pulse) (Note 2)	$I_{CP}$	5	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.

■ THERMAL DATA

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

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

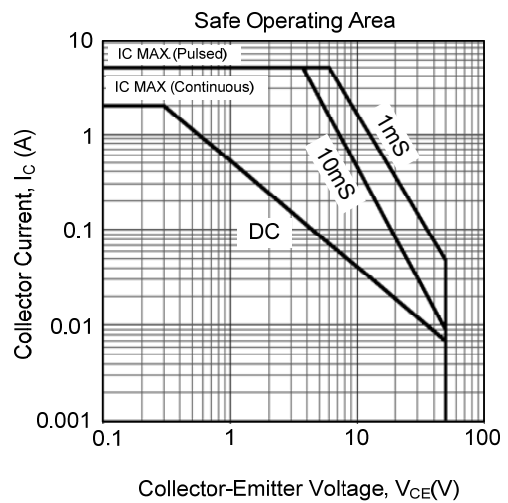
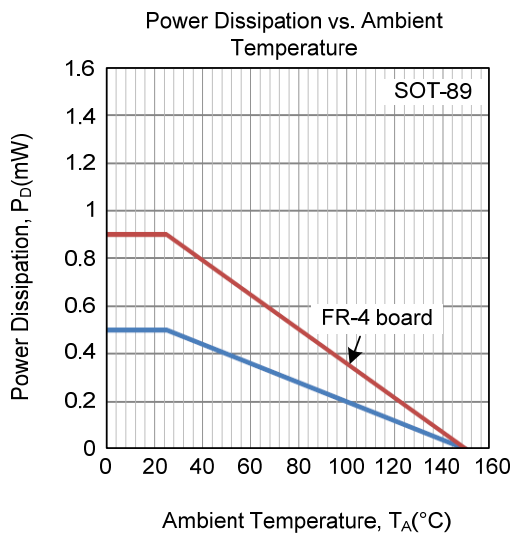
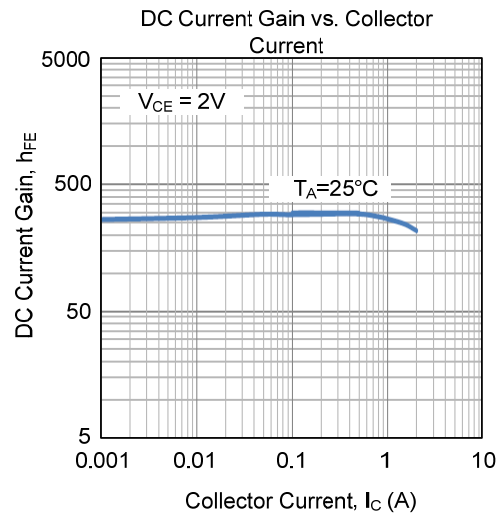
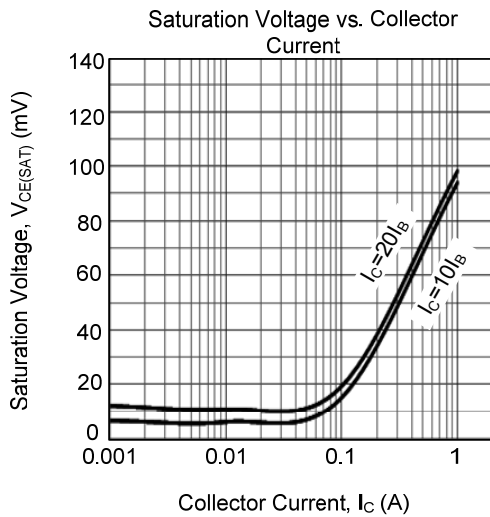
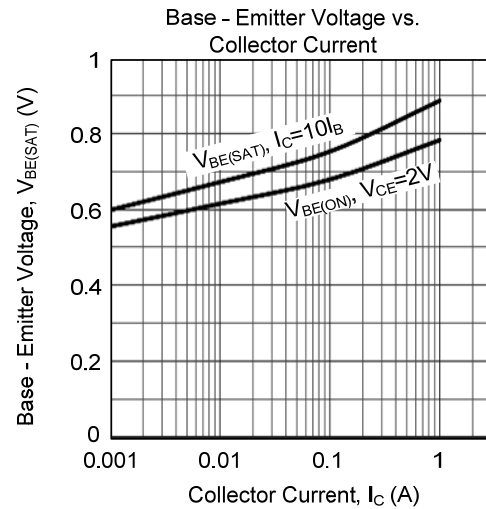
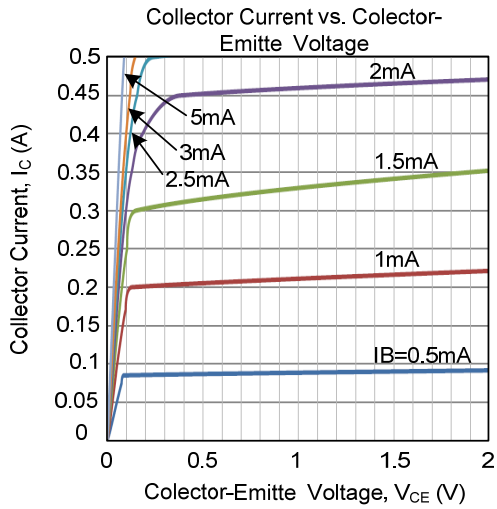
PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector-Base Breakdown Voltage	$BV_{CBO}$	$I_C=50\mu\text{A}$	60			V
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_C=1\text{mA}$	50			V
Emitter-Base Breakdown Voltage	$BV_{EBO}$	$I_E=50\mu\text{A}$	6			V
Collector Cutoff Current	$I_{CBO}$	$V_{CB}=60\text{V}$			0.1	$\mu\text{A}$
Emitter Cutoff Current	$I_{EBO}$	$V_{EB}=5\text{V}$			0.1	$\mu\text{A}$
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



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