



## 2SC4466

Preliminary

**NPN EPITAXIAL SILICON TRANSISTOR**

### SILICON NPN TRIPLE DIFFUSED PLANAR TRANSISTOR

#### DESCRIPTION

The UTC **2SC4466** is a silicon NPN triple diffused planar transistor, it uses UTC's advanced technology to provide the customers with high DC current gain and high collector-base breakdown voltage, etc.

The UTC **2SC4466** is suitable for audio and general purpose, etc.

#### FEATURES

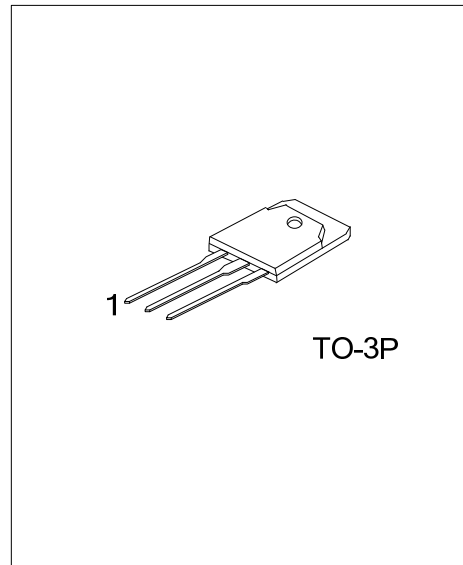
- \* High DC current gain
- \* High collector-base breakdown voltage

#### ORDERING INFORMATION

Ordering Number		Package	Pin Assignment			Packing
Lead Free	Halogen Free		1	2	3	
2SC4466L-x-T3P-T	2SC4466G-x-T3P-T	TO-3P	B	C	E	Tube

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

<p>2SC4466L-x-T3P-T</p> <p>(1) Packing Type (2) Package Type (3) Rank (4) Lead Free</p>	<p>(1) T: Tube (2) T3P: TO-3P (3) x: reference to Classification of <math>h_{FE}</math> (4) L: Lead Free, G: Halogen Free</p>
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■ ABSOLUTE MAXIMUM RATINGS ( $T_A=25^\circ\text{C}$ )

PARAMETER	SYMBOL	RATINGS	UNIT
Collector-Base Voltage	$V_{CBO}$	120	V
Collector-Emitter Voltage	$V_{CEO}$	80	V
Emitter-Base Voltage	$V_{EBO}$	6	V
Collector Current	$I_C$	6	A
Base Current	$I_B$	3	A
Collector Power Dissipation ( $T_C=25^\circ\text{C}$ )	$P_C$	60	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.

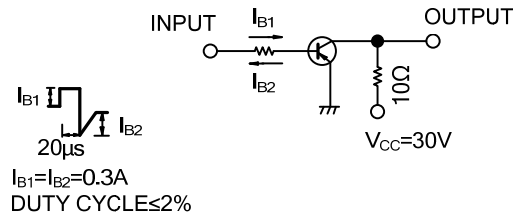
■ ELECTRICAL CHARACTERISTICS ( $T_A=25^\circ\text{C}$ )

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Collector Cut-Off Current	$I_{CBO}$	$V_{CB}=120\text{V}$			10	$\mu\text{A}$
Emitter Cut-Off Current	$I_{EBO}$	$V_{EB}=6\text{V}$			10	$\mu\text{A}$
Collector-Emitter Breakdown Voltage	$BV_{CEO}$	$I_C=50\text{mA}$	80			V
DC Current Gain	$h_{FE}$	$V_{CE}=4\text{V}, I_C=2\text{A}$	50		180	
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C=2\text{A}, I_B=0.2\text{A}$			1.5	V
Current Gain Bandwidth Product	$f_T$	$V_{CE}=12\text{V}, I_E=-0.5\text{A}$		20		MHz
Output Capacitance	$C_{ob}$	$V_{CB}=10\text{V}, f=1\text{MHz}$		110		pF
Switching time	Turn-on time	$t_{ON}$	$V_{CC}=30\text{V}, R_L=10\Omega, I_C=3\text{A},$ $I_{B1}=0.3\text{A}, I_{B2}=0.3\text{A}$	0.16		$\mu\text{S}$
	Storage time	$t_S$		2.60		$\mu\text{S}$
	Fall time	$t_F$		0.34		$\mu\text{S}$

■ CLASSIFICATION OF  $h_{FE}$

RANK	O	P	Y
RANGE	50~100	70~140	90~180

■ TEST CIRCUIT



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