



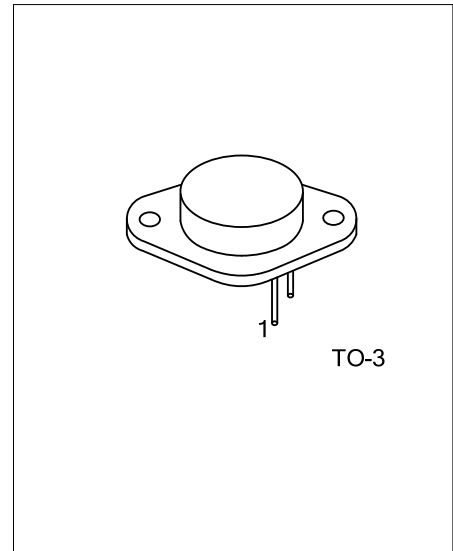
# 2N2955

# PNP SILICON TRANSISTOR

## SILICON PNP TRANSISTORS

### DESCRIPTION

The UTC 2N2955 is a silicon PNP transistor in TO-3 metal case. It is intended for power switching circuits, series and shunt regulators, output stages and high fidelity amplifiers.



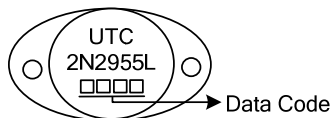
### ORDERING INFORMATION

Ordering Number	Package	Pin Assignment			Packing
		1	2	3	
2N2955L-T30-Y	TO-3	E	B	C	Tray

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

<p>2N2955L-T30-Y</p>	<p>(1) Y: Tray</p> <p>(2) T30: TO-3</p> <p>(3) L: Lead Free</p>
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### MARKING



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

PARAMETERS	SYMBOL	RATINGS	UNITS
Collector-Base Voltage	$V_{CBO}$	100	V
Collector-Emitter Voltage	$V_{CEO}$	60	V
Emitter-Base Voltage	$V_{EBO}$	7	V
Collector-Emitter Voltage	$V_{CEV}$	70	V
Collector Current	$I_C$	15	A
Collector Peak Current (Note)	$I_{CM}$	15	A
Base Current	$I_B$	7	A
Base Peak Current (Note)	$I_{BM}$	15	A
Total Dissipation at $T_A=25^\circ\text{C}$	$P_D$	115	W
Max. Operating Junction Temperature	$T_J$	+200	$^\circ\text{C}$
Storage Temperature	$T_{STG}$	-65 ~ 200	$^\circ\text{C}$

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
<b>OFF CHARACTERISTICS</b>						
Collector-Emitter Sustaining Voltage	$V_{CEO(SUS)}$	$I_C=200\text{mA}, I_B=0\text{V}$	60			V
Collector-Emitter Sustaining Voltage	$V_{CER(SUS)}$	$I_C=0.2\text{ A}, R_{BE}=100\Omega$	70			V
Collector Cut-off Current	$I_{CEO}$	$V_{CE}=30\text{V}, I_B=0$			0.7	mA
Collector Cut-off Current	$I_{CEX}$	$V_{CE}=100\text{V}, V_{BE(OFF)}=1.5\text{V}$ $V_{CE}=100\text{V}, V_{BE(OFF)}=1.5\text{V},$ $T_a=150^\circ\text{C}$			1.0 5.0	mA
Emitter Cut-off Current	$I_{EBO}$	$V_{BE}=7\text{V}, I_C=0$			5.0	mA
<b>ON CHARACTERISTICS</b>						
DC Current Gain (Note)	$h_{FE}$	$I_C=4\text{A}, V_{CE}=4\text{V},$ $I_C=10\text{A}, V_{CE}=4\text{V}$	20 5		70	
Collector-Emitter Saturation Voltage	$V_{CE(SAT)}$	$I_C=4\text{A}, I_B=400\text{mA}$ $I_C=10\text{A}, I_B=3.3\text{A}$			1.1 3.0	V
Base-Emitter On Voltage	$V_{BE(ON)}$	$I_C=4\text{A}, V_{CE}=4\text{V}$			1.5	V
<b>SECOND BREAKDOWN</b>						
Second Breakdown Collector with Base Forward Biased	Is/b	$V_{CE}=60\text{V}, T=1.0\text{s}, \text{Non-repetitive}$	2.87			A
<b>DYNAMIC CHARACTERISTICS</b>						
Current Gain-Bandwidth Product	$f_T$	$I_C=0.5\text{A}, V_{CE}=10\text{V}, f=1\text{MHz}$	2.5			MHz
Small-Signal Current Gain	$h_{FE}$	$I_C=1\text{A}, V_{CE}=4\text{V}, f=1\text{kHz}$	15		120	
Small-Signal Current Gain Cut-off Frequency	$f_{hFE}$	$I_C=1\text{A}, V_{CE}=4\text{V}, f=1\text{kHz}$	10			kHz

Note: Pulse Test:  $PW \cong 300\mu\text{s}$ , Duty Cycle  $\cong 2\%$

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