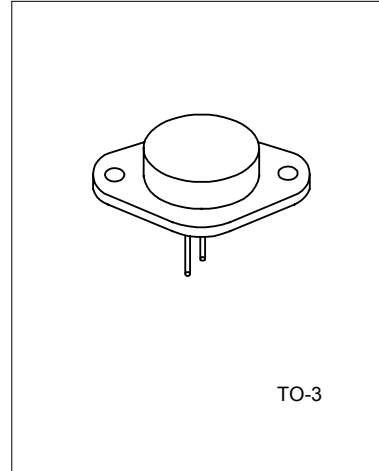


## SILICON PNP TRANSISTORS

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.

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

PARAMETERS	SYMBOL	VALUE	UNITS
Collector-Base Voltage	$V_{CB0}$	100	V
Collector-Emitter Voltage	$V_{CE0}$	60	V
Emitter-Base Voltage	$V_{EB0}$	7	V
Collector-Emitter Voltage	$V_{CEV}$	70	V
Collector Current	$I_c$	15	A
Collector Peak Current(1)	$I_{CM}$	15	A
Base Current	$I_B$	7	A
Base Peak Current(1)	$I_{BM}$	15	A
Total Dissipation at $T_a=25^{\circ}\text{C}$	$P_{tot}$	115	W
Storage Temperature	$T_{STG}$	-65 to 200	$^{\circ}\text{C}$
Max. Operating Junction Temperature	$T_J$	200	$^{\circ}\text{C}$

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

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
OFF CHARACTERISTICS						
Collector-Emitter Sustaining Voltage	$V_{CE0(sus)}$	$I_c=200\text{mA}, I_B=0\text{V}$	60			V
Collector-Emitter Sustaining Voltage	$V_{CER(sus)}$	$I_c=0.2\text{A}, R_{BE}=100\text{ Ohms}$	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
ON CHARACTERISTICS						
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

# UTC2N2955

# SILICON PNP TRANSISTOR

PARAMETER	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNIT
Base-Emitter On Voltage	V <sub>BE(on)</sub>	I <sub>c</sub> =4A, V <sub>CE</sub> =4V			1.5	V
SECOND BREAKDOWN						
Second Breakdown Collector with Base Forward Biased	I <sub>s/b</sub>	V <sub>CE</sub> =60V, T=1.0s, Non-repetitive	2.87			A
DYNAMIC CHARACTERISTICS						
Current Gain-Bandwidth Product	f <sub>T</sub>	I <sub>c</sub> =0.5A, V <sub>CE</sub> =10V, f=1MHz	2.5			MHz
Small-Signal Current Gain	h <sub>FE</sub>	I <sub>c</sub> =1A, V <sub>CE</sub> =4V, f=1kHz	15		120	
Small-Signal Current Gain Cut-off Frequency	f <sub>HFE</sub>	I <sub>c</sub> =1A, V <sub>CE</sub> =4V F=1.0kHz	10			kHz

Note(1): Pulse Test: Puls Width ≤ 300μs, Duty Cycle ≤ 2%