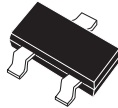


## CMPT930

### NPN SILICON TRANSISTOR



SOT-23 CASE

### DESCRIPTION

The CENTRAL SEMICONDUCTOR CMPT930 type is an NPN silicon transistor manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for small signal general purpose amplifier applications.

**Marking Code is C1X.**

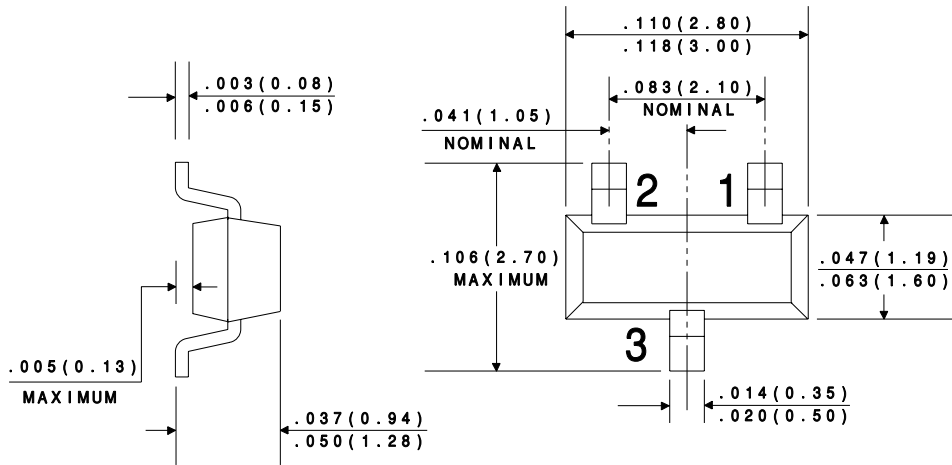
### MAXIMUM RATINGS (T<sub>A</sub>=25°C)

	SYMBOL		UNITS
Collector-Base Voltage	V <sub>CB0</sub>	45	V
Collector-Emitter Voltage	V <sub>CEO</sub>	45	V
Emitter-Base Voltage	V <sub>EBO</sub>	5.0	V
Collector Current	I <sub>C</sub>	30	mA
Power Dissipation	P <sub>D</sub>	350	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	θ <sub>JA</sub>	357	°C/W

### ELECTRICAL CHARACTERISTICS (T<sub>A</sub>=25°C unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I <sub>CBO</sub>	V <sub>CB</sub> =45V		10	nA
I <sub>CEO</sub>	V <sub>CE</sub> =5.0V		10	nA
I <sub>CES</sub>	V <sub>CE</sub> =45V		10	nA
I <sub>EBO</sub>	V <sub>EB</sub> =5.0V		10	nA
BV <sub>CB0</sub>	I <sub>C</sub> =10μA	45		V
BV <sub>CEO</sub>	I <sub>C</sub> =10mA	45		V
BV <sub>EBO</sub>	I <sub>E</sub> =10μA	5.0		V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =0.5mA		1.0	V
V <sub>BE(SAT)</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =0.5mA	0.6	1.0	V
h <sub>FE</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =10μA	100	300	
h <sub>FE</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =500μA	150		
h <sub>FE</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =10mA		600	
f <sub>T</sub>	V <sub>CE</sub> =5.0V, I <sub>C</sub> =500mA, f=30MHz	30		MHz
C <sub>ob</sub>	V <sub>CB</sub> =5.0V, I <sub>E</sub> =0, f=1.0MHz		8.0	pF
NF	V <sub>CE</sub> =5.0V, I <sub>C</sub> =10mA, R <sub>S</sub> =10kΩ, f=10Hz to 15.7kHz		3.0	dB

All dimensions in inches (mm).



LEAD CODE:

- 1) BASE
- 2) EMITTER
- 3) COLLECTOR



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