

**CMPTA96**  
**SURFACE MOUNT**  
**PNP SILICON**  
**EXTREMELY HIGH VOLTAGE**  
**TRANSISTOR**

**Central**<sup>TM</sup>  
**Semiconductor Corp.**



**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMPTA96 type is a surface mount epoxy molded PNP silicon planar epitaxial transistors designed for extremely high voltage applications. **Marking Code is C96.**

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

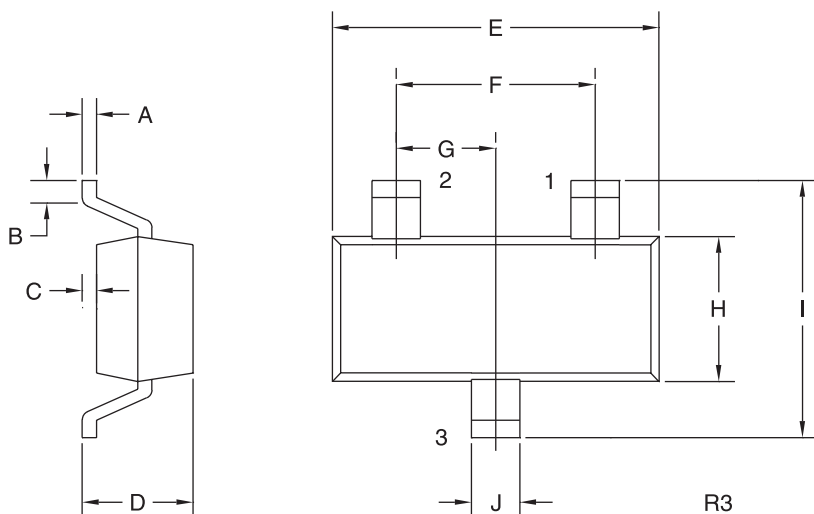
	SYMBOL		UNITS
Collector-Base Voltage	V <sub>CBO</sub>	450	V
Collector-Emitter Voltage	V <sub>CEO</sub>	450	V
Emitter-Base Voltage	V <sub>EBO</sub>	6.0	V
Collector Current	I <sub>C</sub>	500	mA
Power Dissipation	P <sub>D</sub>	350	mW
Operating and Storage Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	θ <sub>JA</sub>	357	°C/W

**ELECTRICAL CHARACTERISTICS:**

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I <sub>CBO</sub>	V <sub>CB</sub> =400V			100	nA
I <sub>EBO</sub>	V <sub>BE</sub> =4.0V			100	nA
BV <sub>CBO</sub>	I <sub>C</sub> =100μA	450	500		V
BV <sub>CEO</sub>	I <sub>C</sub> =1.0mA	450	490		V
BV <sub>EBO</sub>	I <sub>E</sub> =10μA	6.0	9.7		V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =1.0mA, I <sub>B</sub> =0.1mA			0.20	V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =1.0mA			0.30	V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =50mA, I <sub>B</sub> =5.0mA		0.15	0.50	V
V <sub>BE(SAT)</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =1.0mA			1.0	V
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =1.0mA	40			
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =10mA	50	120	200	
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =50mA	45			
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =100mA	25	35		
f <sub>T</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =10mA, f=10MHz	20			MHz
C <sub>ob</sub>	V <sub>CB</sub> =20V, I <sub>E</sub> =0, f=1.0MHz			7.0	pF
C <sub>ib</sub>	V <sub>EB</sub> =0.5V, I <sub>C</sub> =0, f=1.0MHz			130	

R1 ( 14-June2001)

SOT-23 CASE - MECHANICAL OUTLINE



LEAD CODE:

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

MARKING CODE: C96

SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R3)