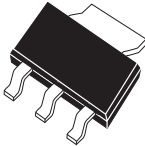


**CBCP68 NPN  
CBCP69 PNP**

**SILICON COMPLEMENTARY  
SMALL SIGNAL TRANSISTORS**



**SOT-223 CASE**

## DESCRIPTION:

The CENTRAL SEMICONDUCTOR CBCP68, CBCP69 types are complementary silicon transistor manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for applications requiring high current capability.

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

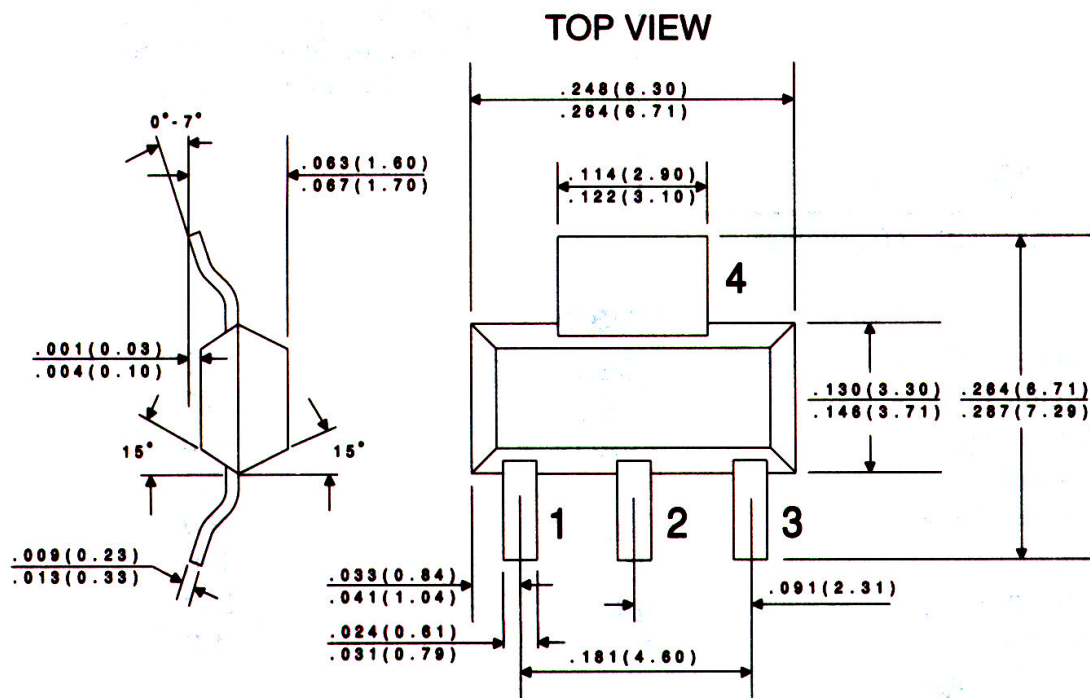
	SYMBOL		UNITS
Collector-Emitter Voltage	V <sub>CES</sub>	25	V
Collector-Emitter Voltage	V <sub>CEO</sub>	20	V
Emitter-Base Voltage	V <sub>EBO</sub>	5.0	V
Collector Current	I <sub>C</sub>	1.0	A
Collector Current-Peak	I <sub>CM</sub>	2.0	A
Base Current	I <sub>B</sub>	100	mA
Base Current-Peak	I <sub>BM</sub>	200	mA
Power Dissipation	P <sub>D</sub>	2.0	W
Operating and Storage			
Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance	θ <sub>JA</sub>	62.5	°C/W

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I <sub>CBO</sub>	V <sub>CB</sub> =25V			10	mA
I <sub>CBO</sub>	V <sub>CB</sub> =25V, T <sub>A</sub> =150°C			1.0	mA
I <sub>EBO</sub>	V <sub>EB</sub> =5.0V			10	mA
BV <sub>CBO</sub>	I <sub>C</sub> =10mA	25			V
BV <sub>CEO</sub>	I <sub>C</sub> =10mA	20			V
BV <sub>EBO</sub>	I <sub>E</sub> =1.0mA	5.0			V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =1.0A, I <sub>B</sub> =100mA			0.5	V
V <sub>BE(ON)</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =5.0mA		0.6		V
V <sub>BE(ON)</sub>	V <sub>CE</sub> =1.0V, I <sub>C</sub> =1.0A			1.0	V
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =5.0mA	50			

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$h_{FE}$	$V_{CE}=1.0V, I_C=500mA$	85		375	
$h_{FE}$	$V_{CE}=1.0V, I_C=1.0A$	60			
$f_T$	$V_{CE}=5.0V, I_C=10mA, f=20MHz$	65			MHz
$C_{ob}$	$V_{CB}=5.0V, I_E=0, F=450kHz$		25		pF

All dimensions in inches (mm).

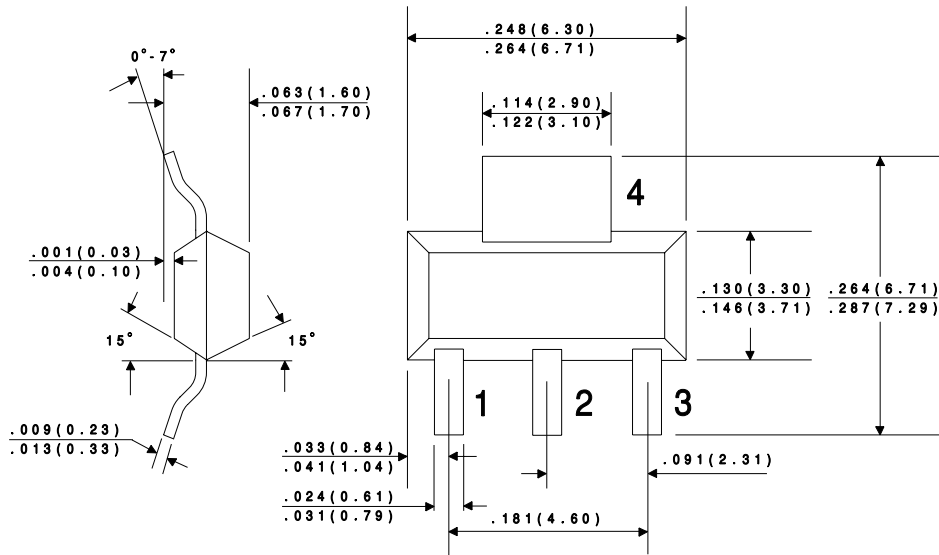


LEAD CODE:

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
$h_{FE}$	$V_{CE}=1.0V, I_C=500mA$	85		375	
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$C_{ob}$	$V_{CB}=5.0V, I_E=0, F=450kHz$		25		pF

All dimensions in inches (mm).



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