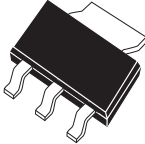


CBCP68 NPN
CBCP69 PNP

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 ($T_A=25^{\circ}\text{C}$)

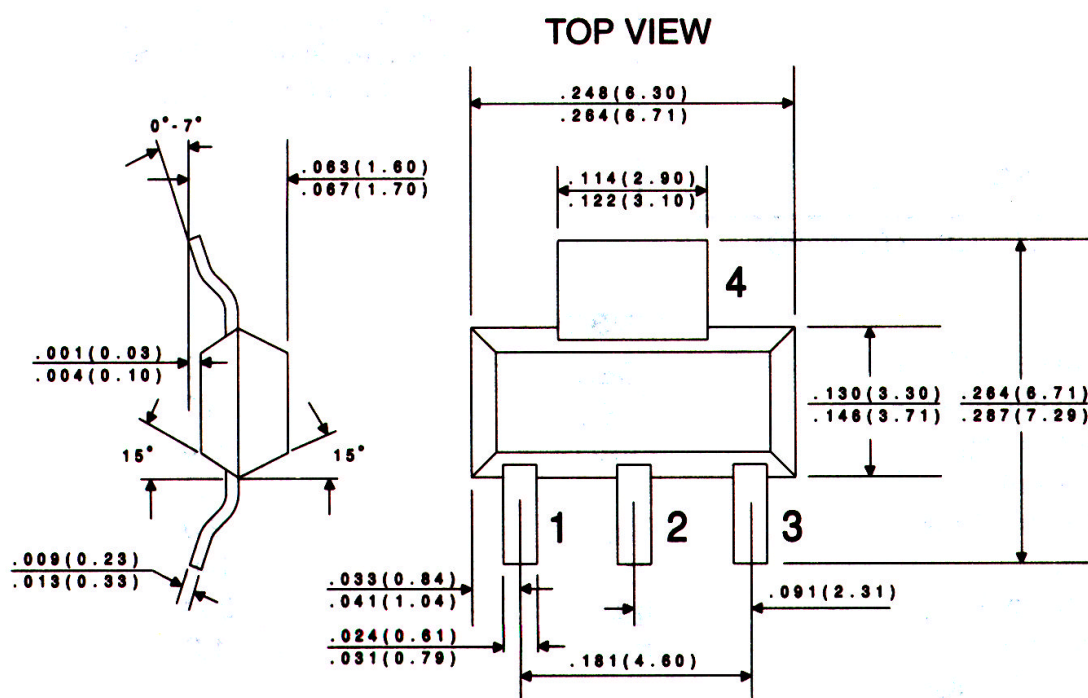
	SYMBOL		UNITS
Collector-Emitter Voltage	V_{CES}	25	V
Collector-Emitter Voltage	V_{CEO}	20	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Collector Current	I_C	1.0	A
Collector Current-Peak	I_{CM}	2.0	A
Base Current	I_B	100	mA
Base Current-Peak	I_{BM}	200	mA
Power Dissipation	P_D	2.0	W
Operating and Storage			
Junction Temperature	T_J, T_{stg}	-65 to +150	$^{\circ}\text{C}$
Thermal Resistance	θ_{JA}	62.5	$^{\circ}\text{C/W}$

ELECTRICAL CHARACTERISTICS ($T_A=25^{\circ}\text{C}$ unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_{CBO}	$V_{CB}=25\text{V}$			10	mA
I_{CBO}	$V_{CB}=25\text{V}, T_A=150^{\circ}\text{C}$			1.0	mA
I_{EBO}	$V_{EB}=5.0\text{V}$			10	mA
BV_{CBO}	$I_C=10\text{mA}$	25			V
BV_{CEO}	$I_C=10\text{mA}$	20			V
BV_{EBO}	$I_E=1.0\text{mA}$	5.0			V
$V_{CE(SAT)}$	$I_C=1.0\text{A}, I_B=100\text{mA}$			0.5	V
$V_{BE(ON)}$	$V_{CE}=10\text{V}, I_C=5.0\text{mA}$		0.6		V
$V_{BE(ON)}$	$V_{CE}=1.0\text{V}, I_C=1.0\text{A}$			1.0	V
h_{FE}	$V_{CE}=10\text{V}, I_C=5.0\text{mA}$	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).

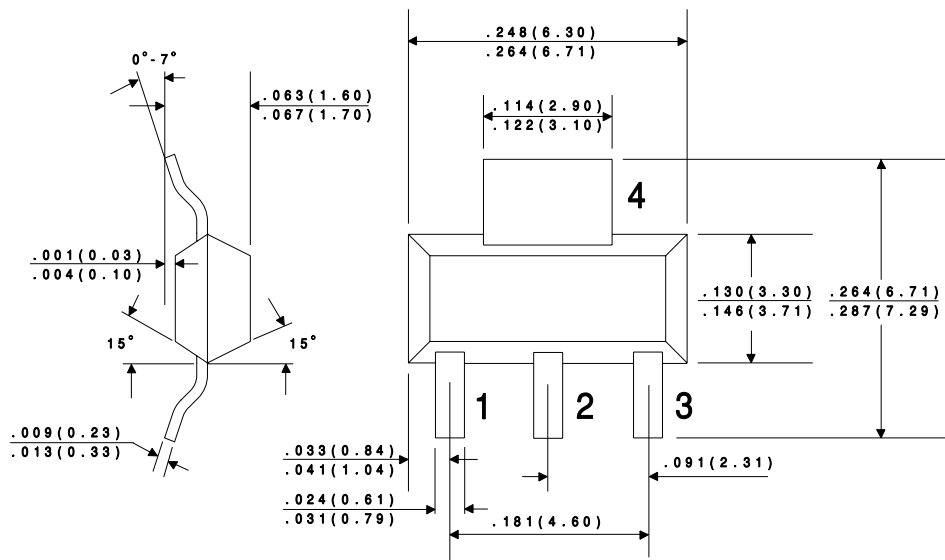


LEAD CODE:

- 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	
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:

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