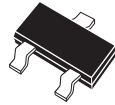


**CMPT6428
CMPT6429**

NPN SILICON TRANSISTOR



SOT-23 CASE

CentralTM

Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMPT6428, CMPT6429 types are NPN Silicon Transistors manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for high gain amplifier applications.

MARKING CODES:

CMPT6428: C1K

CMPT6429: C1L

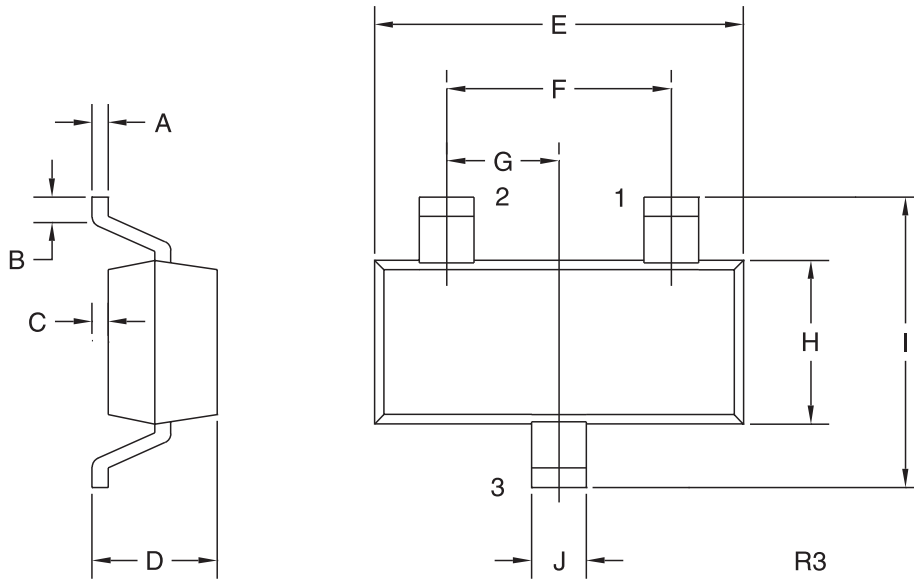
MAXIMUM RATINGS: ($T_A=25^\circ\text{C}$)

	SYMBOL	CMPT6428	CMPT6429	UNITS
Collector-Base Voltage	V_{CBO}	60	55	V
Collector-Emitter Voltage	V_{CEO}	50	45	V
Emitter-Base Voltage	V_{EBO}	6.0		V
Continuous Collector Current	I_C	200		mA
Power Dissipation	P_D	350		mW
Operating and Storage				
Junction Temperature	T_J, T_{stg}	-65 to +150		$^\circ\text{C}$
Thermal Resistance	θ_{JA}	357		$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	CMPT6428		CMPT6429		UNITS
		MIN	MAX	MIN	MAX	
I_{CBO}	$V_{CB}=30\text{V}$		10		10	nA
I_{CEO}	$V_{CE}=30\text{V}$		100		100	nA
I_{EBO}	$V_{BE}=5.0\text{V}$		10		10	nA
BV_{CBO}	$I_C=100\mu\text{A}$	60		55		V
BV_{CEO}	$I_C=1.0\text{mA}$	50		45		V
$V_{CE(SAT)}$	$I_C=10\text{mA}, I_B=0.5\text{mA}$		0.20		0.20	V
$V_{CE(SAT)}$	$I_C=100\text{mA}, I_B=5.0\text{mA}$		0.60		0.60	V
$V_{BE(ON)}$	$V_{CE}=5.0\text{V}, I_C=1.0\text{mA}$	0.56	0.66	0.56	0.66	V
h_{FE}	$V_{CE}=5.0\text{V}, I_C=10\mu\text{A}$	250		500		
h_{FE}	$V_{CE}=5.0\text{V}, I_C=100\mu\text{A}$	250	650	500	1250	
h_{FE}	$V_{CE}=5.0\text{V}, I_C=1.0\text{mA}$	250		500		
h_{FE}	$V_{CE}=5.0\text{V}, I_C=10\text{mA}$	250		500		
f_T	$V_{CE}=5.0\text{V}, I_C=1.0\text{mA}, f=100\text{MHz}$	100	700	100	700	MHz
C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz}$		3.0		3.0	pF
C_{ib}	$V_{BE}=0.5\text{V}, I_C=0, f=1.0\text{MHz}$		8.0		8.0	pF

SOT-23 CASE - MECHANICAL OUTLINE



LEAD CODE:

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

MARKING CODES:

CMPT6428: C1K
CMPT6429: C1L

SYMBOL	DIMENSIONS			
	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)