## **CMPT5401**

## **SURFACE MOUNT** PNP SILICON TRANSISTOR

 $h_{\mathsf{FE}}$ 

 $C_{ob}$ 

h<sub>fe</sub>

 $N_{\mathsf{F}}$ 

 $f_T$ 



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# **DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMPT5401 type is a PNP silicon transistor manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for high voltage amplifier applications.

**MARKING CODE: C2L** 



 $V_{CF}$ =5.0V,  $I_{C}$ =50mA

f=10Hz to 15.7kHz

 $V_{CE}$ =10V,  $I_{C}$ =10mA, f=100MHz

 $V_{CF}$ =10V,  $I_{C}$ =1.0mA, f=1.0kHz

 $V_{CE}$ =5.0V,  $I_{C}$ =250 $\mu$ A,  $R_{S}$ =1.0 $k\Omega$ ,

V<sub>CB</sub>=10V, I<sub>E</sub>=0, f=1.0MHz

MAXIMUM RATINGS: (T <sub>A</sub> =25°C)		SYMBOL		UNITS
Collector-Base Voltage		$V_{CBO}$	160	V
Collector-Emitter Voltage		$V_{CEO}$	150	V
Emitter-Base Voltage		$V_{EBO}$	5.0	V
Continuous Collector Current		IC	600	mA
Power Dissipation		$P_{D}$	350	mW
Operating and Storage Junction Temperature		T <sub>J</sub> , T <sub>stg</sub>	-65 to +150	°C
Thermal Resistance		$\Theta_{JA}$	357	°C/W
ELECTRICAL SYMBOL	CHARACTERISTICS: (T <sub>A</sub> =25°C unl TEST CONDITIONS	less otherwise note	ed) MAX	UNITS
I <sub>CBO</sub>	V <sub>CB</sub> =120V		50	nA
I <sub>CBO</sub>	V <sub>CB</sub> =120V, T <sub>A</sub> =100°C		50	μΑ
I <sub>EBO</sub>	V <sub>EB</sub> =3.0V		50	nA
BV <sub>CBO</sub>	I <sub>C</sub> =100μA	160		V
BVCEO	I <sub>C</sub> =1.0mA	150		V
BVEBO	I <sub>E</sub> =10μA	5.0		V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =1.0mA		0.2	V
VCE(SAT)	I <sub>C</sub> =50mA, I <sub>B</sub> =5.0mA		0.5	V
V <sub>BE(SAT)</sub>	I <sub>C</sub> =10mA, I <sub>B</sub> =1.0mA		1.0	V
V <sub>BE(SAT)</sub>	I <sub>C</sub> =50mA, I <sub>B</sub> =5.0mA		1.0	V
hFE	$V_{CE}$ =5.0V, $I_{C}$ =1.0mA	50		
hFE	$V_{CE}$ =5.0V, $I_{C}$ =10mA	60	240	

50

100

40

300

6.0

200

8.0

R6 (1-February 2010)

 $\mathsf{MHz}$ 

рF

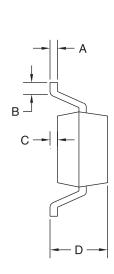
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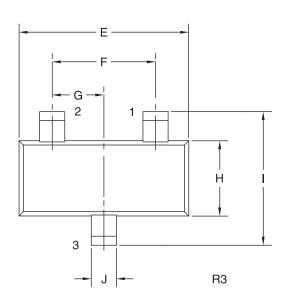
# **CMPT5401**

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# **SOT-23 CASE - MECHANICAL OUTLINE**





# LEAD CODE:

- 1) Base 2) Emitter 3) Collector

MARKING CODE: C2L

DIMENSIONS							
	INCHES		MILLIMETERS				
SYMBOL	MIN	MAX	MIN	MAX			
Α	0.003	0.007	0.08	0.18			
В	0.006	-	0.15	-			
С	-	0.005	-	0.13			
D	0.035	0.043	0.89	1.09			
Е	0.110	0.120	2.80	3.05			
F	0.075		1.90				
G	0.037		0.95				
Н	0.047	0.055	1.19	1.40			
ĺ	0.083	0.098	2.10	2.49			
J	0.014	0.020	0.35	0.50			

SOT-23 (REV: R3)

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- · Inventory bonding
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- · Custom bar coding for shipments
- · Custom product packing

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### REQUESTING PRODUCT PLATING

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- 2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

#### **CONTACT US**

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