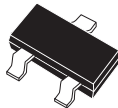


CMPT5401

PNP SILICON TRANSISTOR



SOT-23 CASE

DESCRIPTION:

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

Marking Code is C2L.

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

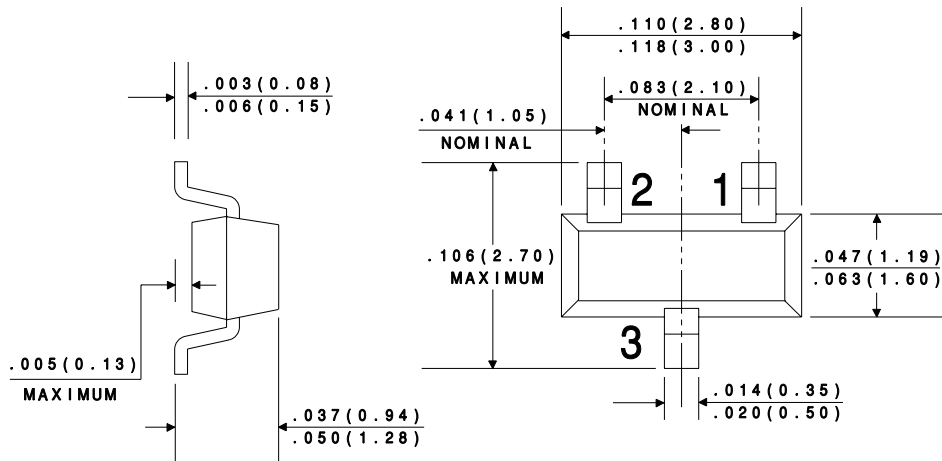
	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	160	V
Collector-Emitter Voltage	V_{CEO}	150	V
Emitter-Base Voltage	V_{EBO}	5.0	V
Collector Current	I_C	500	mA
Power Dissipation	P_D	350	mW
Operating and Storage			
Junction Temperature	T_J, T_{stg}	-65 to +150	$^{\circ}\text{C}$
Thermal Resistance	θ_{JA}	357	$^{\circ}\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CBO}	$V_{CB}=100\text{V}$		50	nA
I_{CBO}	$V_{CB}=100\text{V}, T_A=150^{\circ}\text{C}$		50	μA
BV_{CBO}	$I_C=100\mu\text{A}$	160		V
BV_{CEO}	$I_C=1.0\text{mA}$	150		V
BV_{EBO}	$I_E=10\mu\text{A}$	5.0		V
$V_{CE}(\text{SAT})$	$I_C=10\text{mA}, I_B=1.0\text{mA}$		0.2	V
$V_{CE}(\text{SAT})$	$I_C=50\text{mA}, I_B=5.0\text{mA}$		0.5	V
$V_{BE}(\text{SAT})$	$I_C=10\text{mA}, I_B=1.0\text{mA}$		1.0	V
$V_{BE}(\text{SAT})$	$I_C=50\text{mA}, I_B=5.0\text{mA}$		1.0	V
h_{FE}	$V_{CE}=5.0\text{V}, I_C=1.0\text{mA}$	50		
h_{FE}	$V_{CE}=5.0\text{V}, I_C=10\text{mA}$	60	240	
h_{FE}	$V_{CE}=5.0\text{V}, I_C=50\text{mA}$	50		
f_T	$V_{CE}=10\text{V}, I_C=10\text{mA}, f=100\text{MHz}$	100	300	MHz
C_{ob}	$V_{CB}=10\text{V}, I_E=0, f=1.0\text{MHz}$		6.0	pF

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
h_{fe}	$V_{CE}=10V$, $I_C=1.0mA$, $f=1.0kHz$	40	200	
NF	$V_{CE}=5.0V$, $I_C=200\mu A$, $R_S=10\Omega$ $f=10Hz$ to $15.7kHz$		8.0	dB

All dimensions in inches (mm).



LEAD CODE:

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