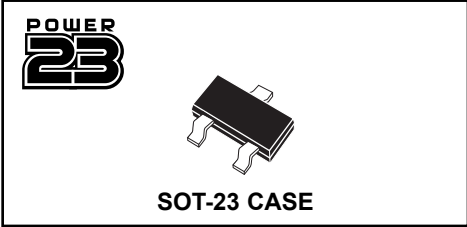


PRELIMINARY

CMPT751
SURFACE MOUNT
PNP HIGH CURRENT
SILICON TRANSISTOR



CentralTM

Semiconductor Corp.

DESCRIPTION:
The CENTRAL SEMICONDUCTOR CMPT751 type is a high current PNP Silicon Transistor, epoxy molded in a space saving Power SOT-23 surface mount package, designed for high current applications.

MARKING CODE: C751

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

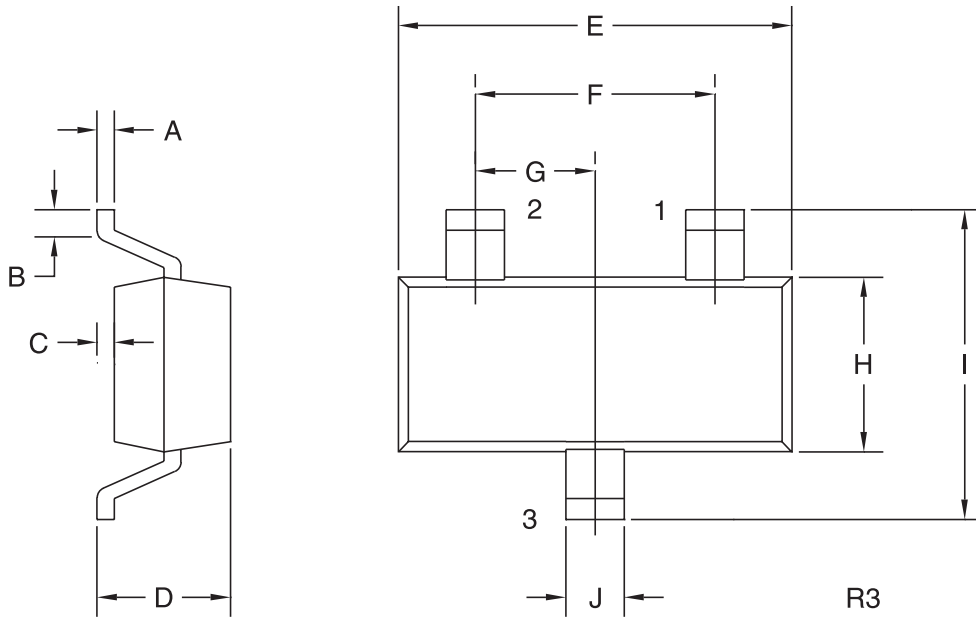
- Collector-Base Voltage
- Collector-Emitter Voltage
- Emitter-Base Voltage
- Collector Current
- Power Dissipation
- Operating and Storage
- Junction Temperature
- Thermal Resistance

SYMBOL		UNITS
V_{CB0}	80	V
V_{CE0}	60	V
V_{EB0}	5.0	V
I_C	2.0	A
P_D	350	mW
T_J, T_{stg}	-65 to +150	$^\circ\text{C}$
θ_{JA}	357	$^\circ\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CB0}	$V_{CB}=80\text{V}$		100	nA
I_{EB0}	$V_{EB}=4.0\text{V}$		100	nA
BV_{CB0}	$I_C=100\mu\text{A}$	80		V
BV_{CE0}	$I_C=10\text{mA}$	60		V
BV_{EB0}	$I_E=10\mu\text{A}$	5.0		V
$V_{CE(SAT)}$	$I_C=0.5\text{A}, I_B=50\text{mA}$		150	mV
$V_{CE(SAT)}$	$I_C=1.0\text{A}, I_B=100\text{mA}$		200	mV
$V_{CE(SAT)}$	$I_C=2.0\text{A}, I_B=200\text{mA}$		400	mV
$V_{BE(SAT)}$	$I_C=1.0\text{A}, I_B=100\text{mA}$		1.2	V
$V_{BE(ON)}$	$V_{CE}=2.0\text{V}, I_C=1.0\text{A}$		1.0	V
h_{FE}	$V_{CE}=2.0\text{V}, I_C=50\text{mA}$	75		
h_{FE}	$V_{CE}=2.0\text{V}, I_C=500\text{mA}$	100	300	
h_{FE}	$V_{CE}=2.0\text{V}, I_C=1.0\text{A}$	75		
h_{FE}	$V_{CE}=2.0\text{V}, I_C=2.0\text{A}$	40		
f_T	$V_{CE}=5.0\text{V}, I_C=50\text{mA}, f=100\text{MHz}$	75		MHz

SOT-23 CASE - MECHANICAL OUTLINE



LEAD CODE:

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

MARKING CODE: C751

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)