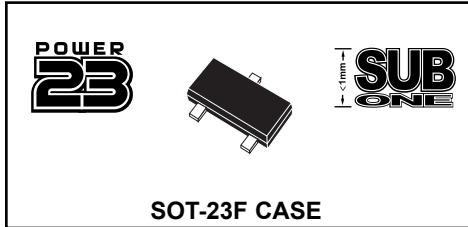


**CMPT751**  
**SURFACE MOUNT**  
**PNP HIGH CURRENT TRANSISTOR**



# Central<sup>TM</sup>

**Semiconductor Corp.**

**DESCRIPTION:**

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

Marking code is **C751**.

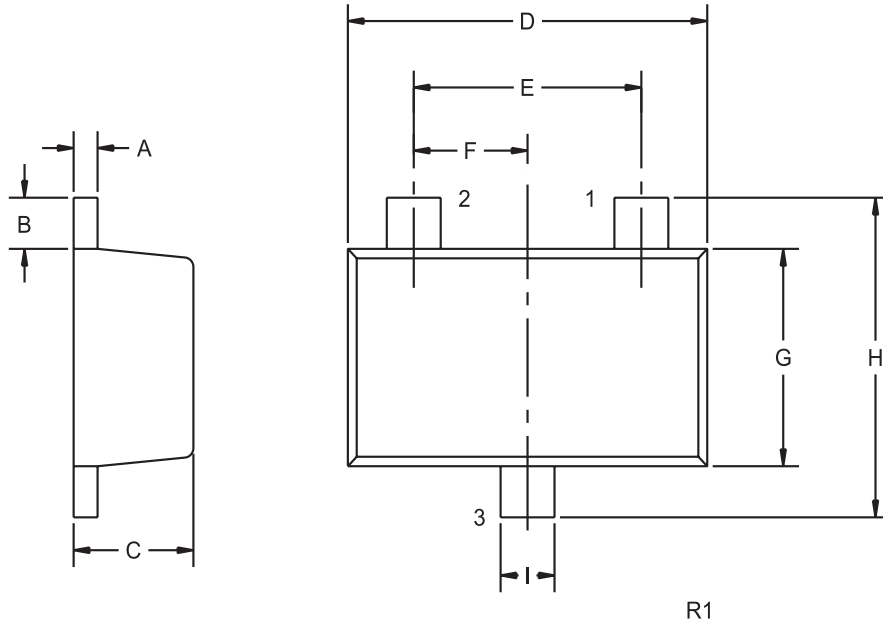
**MAXIMUM RATINGS:** ( $T_A=25^\circ\text{C}$ )

	<b>SYMBOL</b>		<b>UNITS</b>
Collector-Base Voltage	$V_{CB0}$	80	V
Collector-Emitter Voltage	$V_{CE0}$	60	V
Emitter-Base Voltage	$V_{EB0}$	5.0	V
Collector Current	$I_C$	2.0	A
Power Dissipation	$P_D$	350	mW
Operating and Storage			
Junction Temperature	$T_J, T_{stg}$	-65 to +150	$^\circ\text{C}$
Thermal Resistance	$\theta_{JA}$	357	$^\circ\text{C/W}$

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

<b>SYMBOL</b>	<b>TEST CONDITIONS</b>	<b>MIN</b>	<b>MAX</b>	<b>UNITS</b>
$I_{CB0}$	$V_{CB}=80\text{V}$		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-23F CASE - MECHANICAL OUTLINE**



**LEAD CODE:**

- 1) Base
- 2) Emitter
- 3) Collector

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.008	0.10	0.20
B	0.012	0.020	0.30	0.50
C	0.031	0.039	0.80	1.00
D	0.110	0.118	2.80	3.00
E	0.075		1.90	
F	0.037		0.95	
G	0.059	0.067	1.50	1.70
H	0.091	0.098	2.30	2.50
I	0.014	0.018	0.35	0.45

SOT-23F (REV: R1)