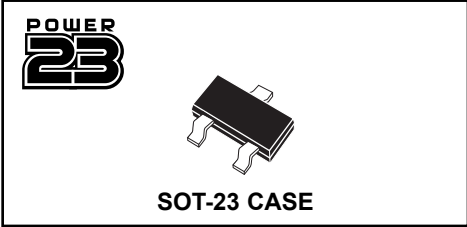


PRELIMINARY

CMPT651
SURFACE MOUNT
NPN HIGH CURRENT
SILICON TRANSISTOR



CentralTM

Semiconductor Corp.

DESCRIPTION:
The CENTRAL SEMICONDUCTOR CMPT651 type is a high current NPN Silicon Transistor, epoxy molded in a space saving Power SOT-23 surface mount package, designed for high current applications.

MARKING CODE: C651

MAXIMUM RATINGS: (T_A=25°C)

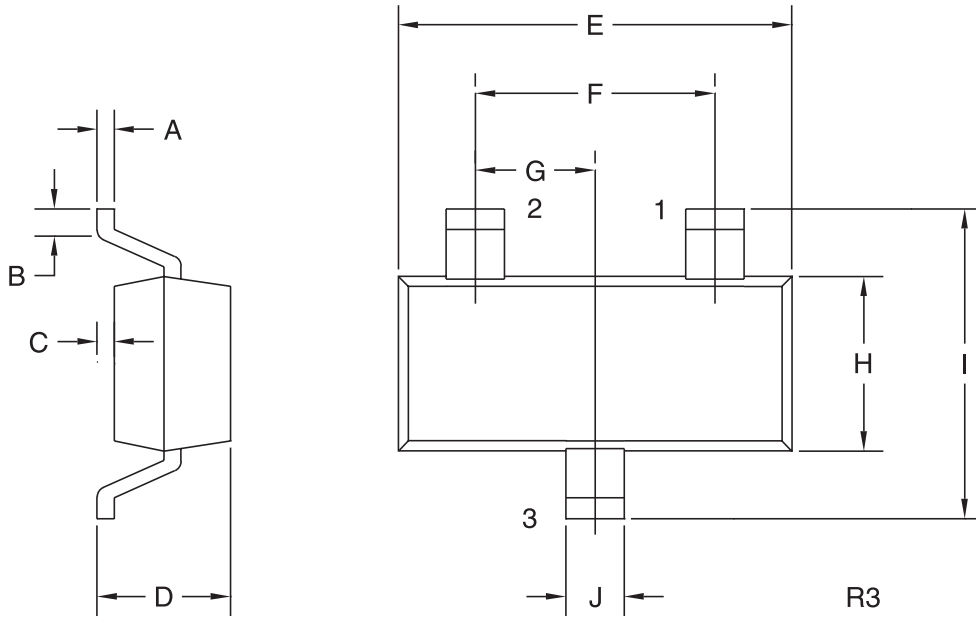
- Collector-Base Voltage
- Collector-Emitter Voltage
- Emitter-Base Voltage
- Continuous Collector Current
- Power Dissipation
- Operating and Storage
- Junction Temperature
- Thermal Resistance

SYMBOL		UNITS
V _{CBO}	80	V
V _{CEO}	60	V
V _{EBO}	5.0	V
I _C	2.0	A
P _D	350	mW
T _J , T _{stg}	-65 to +150	°C
θ _{JA}	357	°C/W

ELECTRICAL CHARACTERISTICS: (T_A=25°C)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I _{CBO}	V _{CB} =80V		100	nA
I _{EBO}	V _{EB} =4.0V		100	nA
BV _{CBO}	I _C =100μA	80		V
BV _{CEO}	I _C =10mA	60		V
BV _{EBO}	I _E =10μA	5.0		V
V _{CE(SAT)}	I _C =0.5A, I _B =50mA		100	mV
V _{CE(SAT)}	I _C =1.0A, I _B =100mA		200	mV
V _{CE(SAT)}	I _C =2.0A, I _B =200mA		400	mV
V _{BE(SAT)}	I _C =1.0A, I _B =100mA		1.2	V
V _{BE(ON)}	V _{CE} =2.0V, I _C =1.0A		1.0	V
h _{FE}	V _{CE} =2.0V, I _C =50mA	75		
h _{FE}	V _{CE} =2.0V, I _C =500mA	100	300	
h _{FE}	V _{CE} =2.0V, I _C =1.0A	75		
h _{FE}	V _{CE} =2.0V, I _C =2.0A	40		
f _T	V _{CE} =5.0V, I _C =50mA, f=100MHz	75		MHz

SOT-23 CASE - MECHANICAL OUTLINE



LEAD CODE:

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

MARKING CODE: C651

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)