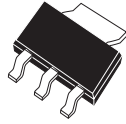


CZT3120

**NPN SILICON SWITCHING
POWER TRANSISTOR**



SOT-223 CASE

CentralTM
Semiconductor Corp.

DESCRIPTION:

The Central Semiconductor CZT3120 NPN Switching Power Transistor, manufactured by the epitaxial planar process, combines both power and high speed switching characteristics in a SOT-223 Surface Mount Package. Typical applications include drivers, DC-DC converters, and general fast switching applications.

MAXIMUM RATINGS (T_A=25°C)

	SYMBOL		UNITS
Collector-Base Voltage	V _{CBO}	120	V
Collector-Emitter Voltage	V _{CEO}	70	V
Emitter-Base Voltage	V _{EBO}	7.0	V
Collector Current	I _C	3.0	A
Power Dissipation	P _D	2.0	W
Operating and Storage			
Junction Temperature	T _J , T _{stg}	-65 to +150	°C
Thermal Resistance	Θ _{JA}	62.5	°C/W

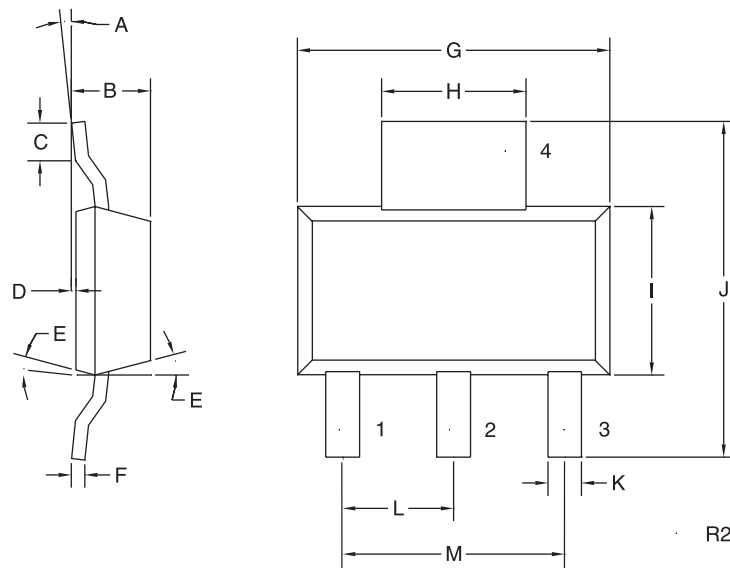
ELECTRICAL CHARACTERISTICS(T_A=25°C)

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I _{CBO}	V _{CB} =80V			1.0	μA
I _{EBO}	V _{EB} =5.0V			1.0	μA
BV _{CBO}	I _C =50μA	120	160		V
BV _{CEO}	I _C =10mA	70	90		V
BV _{EBO}	I _E =50μA	7.0	15		V
V _{CE(SAT)}	I _C =2.0A, I _B =200mA		250	500	mV
V _{BE(ON)}	I _C =2.0A, V _{CE} =1.0V		0.95	1.1	V
h _{FE}	V _{CE} =5.0V, I _C =10mA	100	170		
h _{FE}	V _{CE} =5.0V, I _C =500mA	100	165	300	
h _{FE}	V _{CE} =5.0V, I _C =3.0A	40	75		
f _T	V _{CE} =10V, I _C =500mA, f=1.0MHz	8.0			MHz

R0 (12-March 2002)

**NPN SILICON SWITCHING
POWER TRANSISTOR**

SOT-223 CASE - MECHANICAL OUTLINE



LEAD CODE:

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

SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0°	7°	0°	7°
B	0.063	0.067	1.60	1.70
C	0.022		0.55	
D	0.001	0.004	0.03	0.10
E	15°		15°	
F	0.009	0.013	0.23	0.33
G	0.248	0.264	6.30	6.71
H	0.114	0.122	2.90	3.10
I	0.130	0.146	3.30	3.71
J	0.264	0.287	6.71	7.29
K	0.024	0.031	0.61	0.79
L	0.091		2.31	
M	0.181		4.60	

SOT-223 (REV: R2)

R0 (12-March 2002)