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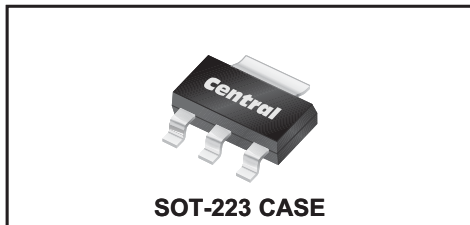
[Central Semiconductor Corp](#)

[CZT3019 TR](#)

For any questions, you can email us directly:

[sales@integrated-circuit.com](mailto:sales@integrated-circuit.com)

**CZT3019**  
**SURFACE MOUNT**  
**NPN SILICON TRANSISTOR**



[www.centralemi.com](http://www.centralemi.com)

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CZT3019 type is an NPN silicon transistor manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for high current general purpose amplifier applications.

**MARKING: FULL PART NUMBER**

**MAXIMUM RATINGS:** (T<sub>A</sub>=25°C)

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

**SYMBOL**

V <sub>CB0</sub>	140
V <sub>CEO</sub>	80
V <sub>EBO</sub>	7.0
I <sub>C</sub>	1.0
I <sub>CM</sub>	1.5
P <sub>D</sub>	2.0
T <sub>J</sub> , T <sub>stg</sub>	-65 to +150
θ <sub>JA</sub>	62.5

**UNITS**

V
V
V
A
A
W
°C
°C/W

**ELECTRICAL CHARACTERISTICS:** (T<sub>A</sub>=25°C unless otherwise noted)

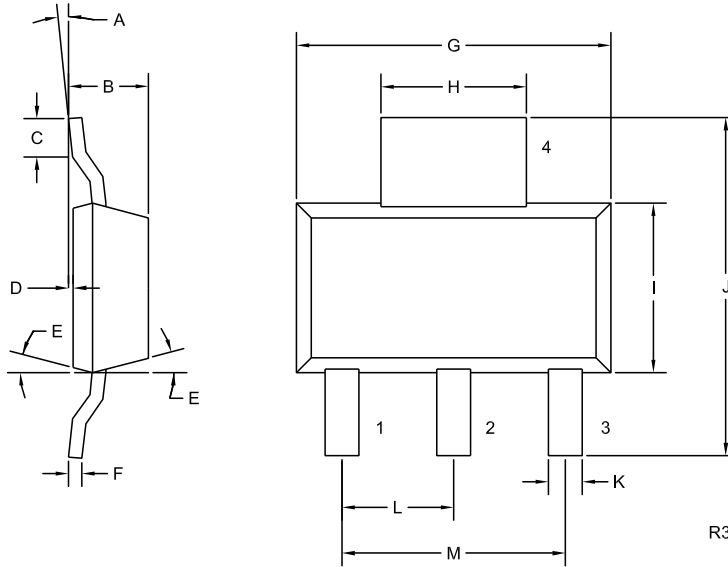
SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I <sub>CB0</sub>	V <sub>CB</sub> =90V		10	nA
I <sub>EBO</sub>	V <sub>EB</sub> =5.0V		10	nA
BV <sub>CB0</sub>	I <sub>C</sub> =100μA	140		V
BV <sub>CEO</sub>	I <sub>C</sub> =30mA	80		V
BV <sub>EBO</sub>	I <sub>E</sub> =100μA	7.0		V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =150mA, I <sub>B</sub> =15mA		0.2	V
V <sub>CE(SAT)</sub>	I <sub>C</sub> =500mA, I <sub>B</sub> =50mA		0.5	V
V <sub>BE(SAT)</sub>	I <sub>C</sub> =150mA, I <sub>B</sub> =15mA		1.1	V
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =0.1mA	50		
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =10mA	90		
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =150mA	100	300	
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =500mA	50		
h <sub>FE</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =1.0A	15		
f <sub>T</sub>	V <sub>CE</sub> =10V, I <sub>C</sub> =50mA, f=20MHz	100	400	MHz
C <sub>ob</sub>	V <sub>CB</sub> =10V, I <sub>E</sub> =0, f=1.0MHz		12	pF
C <sub>ib</sub>	V <sub>EB</sub> =0.5V, I <sub>C</sub> =0, f=1.0MHz		60	pF
NF	V <sub>CE</sub> =10V, I <sub>C</sub> =100μA, R <sub>S</sub> =1.0kΩ, f=1.0kHz		4.0	dB

R6 (9-November 2010)

**CZT3019**  
  
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**SOT-223 CASE - MECHANICAL OUTLINE**



**LEAD CODE:**

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

**MARKING:**  
**FULL PART NUMBER**

<b>DIMENSIONS</b>				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0°	10°	0°	10°
B	0.059	0.071	1.50	1.80
C	0.018	---	0.45	---
D	0.000	0.004	0.00	0.10
E	15°		15°	
F	0.009	0.014	0.23	0.35
G	0.248	0.264	6.30	6.70
H	0.114	0.122	2.90	3.10
I	0.130	0.146	3.30	3.70
J	0.264	0.287	6.70	7.30
K	0.024	0.033	0.60	0.85
L	0.091		2.30	
M	0.181		4.60	

SOT-223 (REV: R3)

R6 (9-November 2010)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- Inventory bonding
- Consolidated shipping options
- Custom bar coding for shipments
- Custom product packing

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### DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

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- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities
- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

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### CONTACT US

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