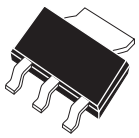
CZT250K

SURFACE MOUNT
NPN EXTREMELY HIGH h_{FE}
SILICON DARLINGTON TRANSISTOR



SOT-223 CASE

Central™
Semiconductor Corp.

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CZT250K type is an NPN silicon Darlington transistor manufactured by the epitaxial planar process, epoxy molded in a surface mount package, designed for applications requiring extremely high gain.

MARKING CODE: FULL PART NUMBER

MAXIMUM RATINGS: (T_A=25°C)

	SYMBOL		UNITS
Collector-Base Voltage	V_{CBO}	50	V
Collector-Emitter Voltage	V_{CEO}	25	V
Emitter-Base Voltage	V_{EBO}	10	V
Collector Current	I_C	1.0	A
Power Dissipation	PD	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 unless otherwise noted)

SYMBOL	TEST CONDITIONS	MIN	MAX	UNITS
I_{CBO}	V_{CB}=30V		100	nA
BV_{CBO}	I_C=10μA	50		V
BV_{CEO}	I_C=10mA	25		V
BV_{EBO}	I_E=100μA	10		V
$V_{CE(SAT)}$	I_C=100mA, I_B=0.1mA		1.5	V
$V_{BE(ON)}$	V_{CE}=5.0V, I_C=100mA		2.0	V
h_{FE}	V_{CE}=5.0V, I_C=10mA	250,000		
h_{FE}	V_{CE}=5.0V, I_C=100mA	250,000		
f_T	V_{CE}=5.0V, I_C=10mA, f=100MHz	125		MHz

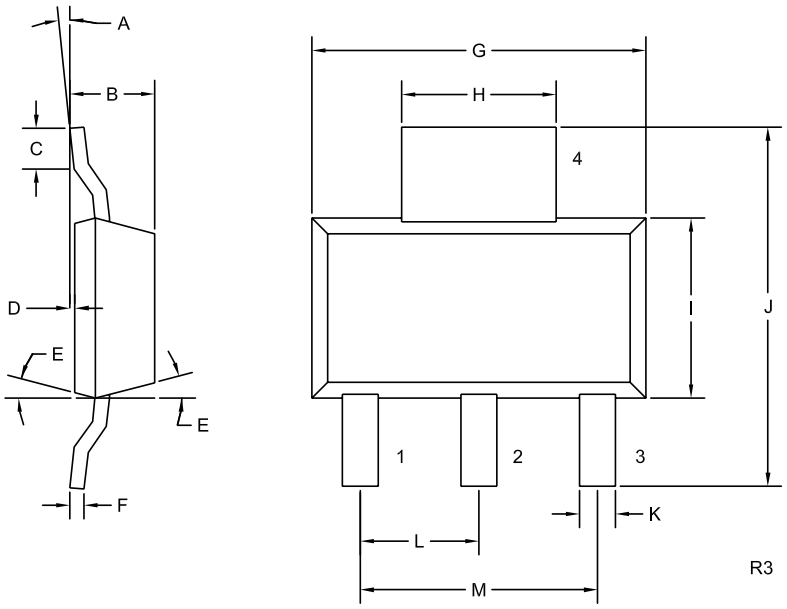
R2 (17-June 2004)

Central™
Semiconductor Corp.

CZT250K

SURFACE MOUNT
NPN EXTREMELY HIGH h_{FE}
SILICON DARLINGTON TRANSISTOR

SOT-223 CASE - MECHANICAL OUTLINE



LEAD CODE:
1) BASE
2) COLLECTOR
3) EMITTER
4) COLLECTOR

MARKING CODE:
FULL PART NUMBER

DIMENSIONS				
	INCHES		MILLIMETERS	
SYMBOL	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)

R2 (17-June 2004)