

CZS5064

**SURFACE MOUNT
SILICON CONTROLLED RECTIFIER**



SOT-223 CASE



www.centralemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CZS5064 type is an epoxy molded PNP Silicon Controlled Rectifier manufactured in an epoxy molded surface mount package, designed for control systems and sensing circuit applications.

MARKING: FULL PART NUMBER

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

	SYMBOL		UNITS
Peak Repetitive Off-State Voltage	V_{DRM}	400	V
Peak Repetitive Reverse Voltage	V_{RRM}	400	V
RMS On-State Current	$I_{\text{T(RMS)}}$	0.8	A
Average On-State Current ($T_C=67^{\circ}\text{C}$)	$I_{\text{T(AV)}}$	0.51	A
Operating Junction Temperature	T_J	-40 to +125	$^{\circ}\text{C}$
Storage Temperature	T_{stg}	-40 to +150	$^{\circ}\text{C}$
Thermal Resistance	θ_{JA}	150	$^{\circ}\text{C/W}$
Thermal Resistance	θ_{JC}	25	$^{\circ}\text{C/W}$

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

SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
I_{DRM}	$V_D=400\text{V}$, $R_{\text{GK}}=1.0\text{K}\Omega$, $T_C=125^{\circ}\text{C}$			50	μA
I_{RRM}	$V_D=400\text{V}$, $R_{\text{GK}}=1.0\text{K}\Omega$, $T_C=125^{\circ}\text{C}$			50	μA
V_T	$I_T=1.2\text{A}$			1.7	V
I_{GT}	$V_D=7.0\text{V}$, $R_L=100\Omega$, $R_{\text{GK}}=1.0\text{K}\Omega$			200	μA
V_{GT}	$V_D=7.0\text{V}$, $R_L=100\Omega$, $R_{\text{GK}}=1.0\text{K}\Omega$			0.8	V
V_{GD}	$V_D=400\text{V}$, $R_L=100\Omega$, $T_C=125^{\circ}\text{C}$	0.1			V
I_H	$V_D=7.0$, $R_{\text{GK}}=1.0\text{K}\Omega$			5.0	mA
t_{ON}	$V_D=400\text{V}$, $I_{\text{GT}}=1.0\text{mA}$, $I_F=1.0\text{A}$, $R_{\text{GK}}=1\text{K}\Omega$, $di/dt=6.0\text{A}/\mu\text{s}$		2.8		μs

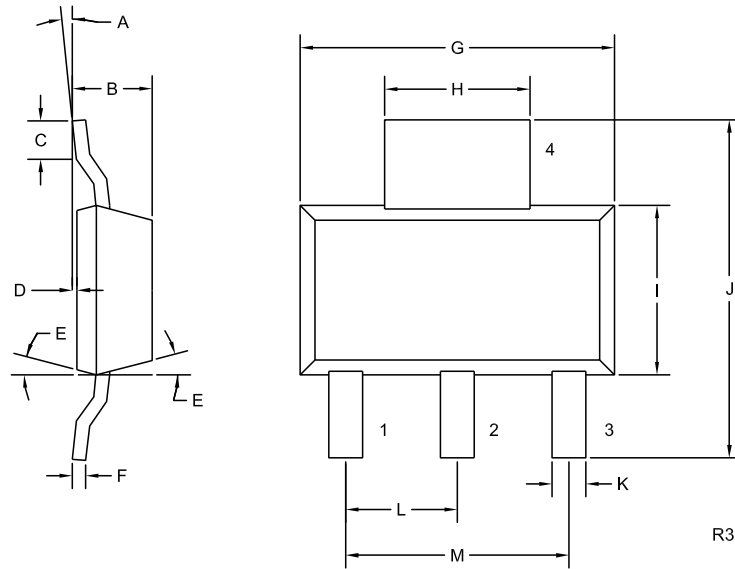
R4 (23-February 2010)

CZS5064

**SURFACE MOUNT
SILICON CONTROLLED RECTIFIER**



SOT-223 CASE - MECHANICAL OUTLINE



LEAD CODE:

- 1) Cathode
- 2) Anode
- 3) Gate
- 4) Anode

MARKING: FULL PART NUMBER

DIMENSIONS				
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)

R4 (23-February 2010)