

CZS5064

**SURFACE MOUNT  
SILICON CONTROLLED RECTIFIER**



**SOT-223 CASE**



[www.centrasemi.com](http://www.centrasemi.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**

<b>MAXIMUM RATINGS:</b> ( $T_A=25^\circ\text{C}$ unless otherwise noted)	<b>SYMBOL</b>		<b>UNITS</b>
Peak Repetitive Off-State Voltage	$V_{\text{DRM}}$	400	V
Peak Repetitive Reverse Voltage	$V_{\text{RRM}}$	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	$T_{\text{stg}}$	-40 to +150	$^\circ\text{C}$
Thermal Resistance	$\theta_{\text{JA}}$	150	$^\circ\text{C/W}$
Thermal Resistance	$\theta_{\text{JC}}$	25	$^\circ\text{C/W}$

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

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

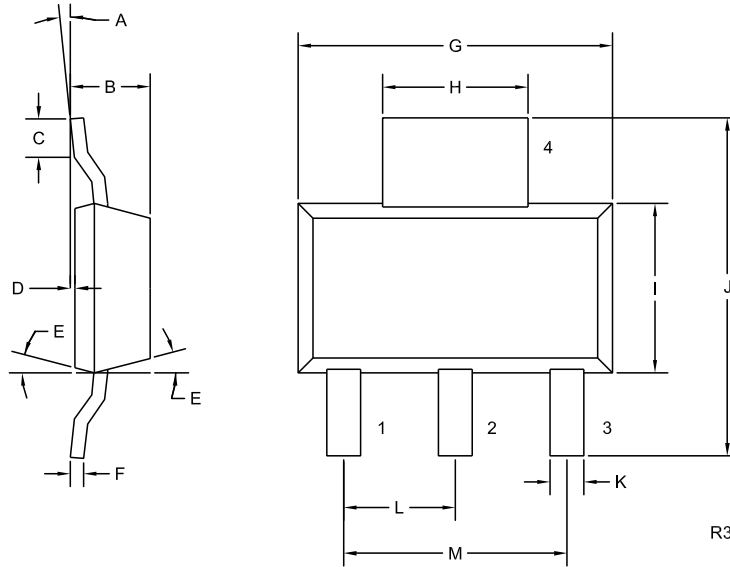
R4 (23-February 2010)

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**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)