

CMPS5061  
 CMPS5062  
 CMPS5063  
 CMPS5064

**SURFACE MOUNT  
 SILICON CONTROLLED RECTIFIER**

**Central**<sup>TM</sup>  
**Semiconductor Corp.**



**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMPS5061 Series types are epoxy molded PNP Silicon Controlled Rectifiers manufactured in an SOT-23 case, designed for control systems and sensing circuit applications.

**Marking codes are P2A, P2B, P2C, and P2D respectively.**

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

	SYMBOL	CMPS5061	CMPS5062	CMPS5063	CMPS5064	UNITS
Peak Repetitive Off-State Voltage	V <sub>DRM</sub>	100	200	300	400	V
Peak Repetitive Reverse Voltage	V <sub>R</sub> RM	100	200	300	400	V
RMS On-State Current	I <sub>T</sub> (RMS)			0.8		A
Average On-State Current (T <sub>C</sub> =67°C)	I <sub>T</sub> (AV)			0.51		A
Power Dissipation	P <sub>D</sub>			350		mW
Operating and Storage						
Junction Temperature	T <sub>J</sub> , T <sub>stg</sub>		-65 to +150			°C
Thermal Resistance	θ <sub>JA</sub>			357		°C/W

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

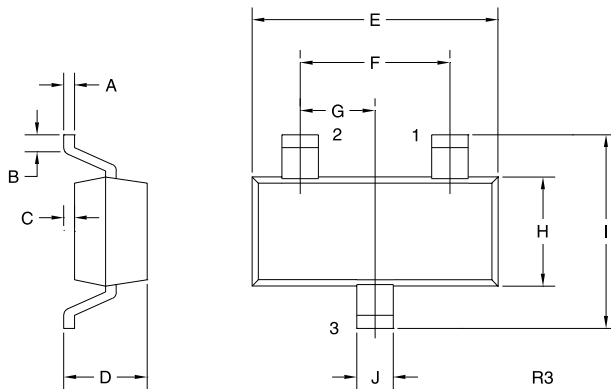
SYMBOL	TEST CONDITIONS	CMPS5061		CMPS5062		CMPS5063		CMPS5064		UNITS
		MIN	MAX	MIN	MAX	MIN	MAX	MIN	MAX	
I <sub>DRM</sub>	V <sub>D</sub> =Rated V <sub>DRM</sub> , R <sub>GK</sub> =1KΩ		1.0		1.0		1.0		1.0	μA
I <sub>R</sub> RM	V <sub>D</sub> =Rated V <sub>DRM</sub> , R <sub>GK</sub> =1KΩ		1.0		1.0		1.0		1.0	μA
I <sub>DRM</sub>	V <sub>D</sub> =Rated V <sub>DRM</sub> , R <sub>GK</sub> =1KΩ, T <sub>C</sub> =125°C		50		50		50		50	μA
I <sub>R</sub> RM	V <sub>D</sub> =Rated V <sub>DRM</sub> , R <sub>GK</sub> =1KΩ, T <sub>C</sub> =125°C		50		50		50		50	μA
V <sub>T</sub>	I <sub>T</sub> =1.2A		1.7		1.7		1.7		1.7	V
I <sub>GT</sub>	V <sub>D</sub> =7.0V, R <sub>L</sub> =100Ω, R <sub>GK</sub> =1KΩ		200		200		200		200	μA
V <sub>GT</sub>	V <sub>D</sub> =7.0V, R <sub>L</sub> =100Ω, R <sub>GK</sub> =1KΩ		0.8		0.8		0.8		0.8	V
V <sub>GD</sub>	V <sub>D</sub> = Rated V <sub>DRM</sub> , R <sub>L</sub> =100Ω, T <sub>C</sub> =125°C	0.1		0.1		0.1		0.1		V
I <sub>H</sub>	V <sub>D</sub> =7.0, R <sub>GK</sub> =1KΩ		5.0		5.0		5.0		5.0	mA
t <sub>ON</sub>	V <sub>D</sub> = Rated V <sub>DRM</sub> , I <sub>GT</sub> =1.0mA, R <sub>GK</sub> =1.0Ω, di/dt=6.0A/μs		2.8 TYP		2.8 TYP		2.8 TYP		2.8 TYP	μs

R6 ( 12-June 2001)



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**MECHANICAL OUTLINE - SOT-23**



LEAD CODE:

- 1) CATHODE
- 2) GATE
- 3) ANODE

MARKING CODES:

- CMPS5061:P2A
- CMPS5062:P2B
- CMPS5063:P2C
- CMPS5064:P2D

DIMENSIONS				
SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.003	0.007	0.08	0.18
B	0.006	-	0.15	-
C	-	0.005	-	0.13
D	0.035	0.043	0.89	1.09
E	0.110	0.120	2.80	3.05
F	0.075		1.90	
G	0.037		0.95	
H	0.047	0.055	1.19	1.40
I	0.083	0.098	2.10	2.49
J	0.014	0.020	0.35	0.50

SOT-23 (REV: R3)