

## SURFACE MOUNT SILICON CONTROLLED RECTIFIER





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# DESCRIPTION:

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

MARKING CODE:	CMPS5061: P2A
	CMPS5062: P2B
	CMPS5063: P2C
	CMPS5064: P2D

MAXIMUM RATINGS: (T <sub>A</sub> =25°C) Peak Repetitive Off-State Voltage	SYMBOL V <sub>DRM</sub>	<u>CMPS5061</u> 100	200	CMPS5063 300	CMPS5064 400	UNITS V
Peak Repetitive Reverse Voltage	V <sub>RRM</sub>	100	200	300	400	V
RMS On-State Current	I <sub>T(RMS)</sub>		0.2	25		А
Average On-State Current	IT(AV)		0.16			
Power Dissipation	PD		35	50		mW
Operating Junction Temperature	Тј		-65 to	+125		°C
Storage Temperature	T <sub>stg</sub>		-65 to	+150		°C
Thermal Resistance	$\Theta_{JA}$		28	36		°C/W

	CAL CHARACTERISTICS: (T <sub>A</sub> =25°C) TEST CONDITIONS		<u>S5061</u> MAX		<u>S5062</u> MAX		<u>S5063</u> MAX		<u>S5064</u> MAX	UNITS
I <sub>DRM</sub>	V <sub>D</sub> =Rated V <sub>DRM</sub> , R <sub>GK</sub> =1.0KΩ	-	1.0	-	1.0	-	1.0	-	1.0	μA
IRRM	V <sub>D</sub> =Rated V <sub>DRM</sub> , R <sub>GK</sub> =1.0KΩ	-	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> =1.0KΩ, T <sub>C</sub> =125°C	-	50	-	50	-	50	-	50	μA
IRRM	V <sub>D</sub> =Rated V <sub>DRM</sub> , R <sub>GK</sub> =1.0KΩ, T <sub>C</sub> =125°C	-	50	-	50	-	50	-	50	μA
VTM	I <sub>T</sub> =1.2A	-	1.7	-	1.7	-	1.7	-	1.7	V
IGT	V <sub>D</sub> =7.0V, R <sub>L</sub> =100Ω	-	200	-	200	-	200	-	200	μA
V <sub>GT</sub>	V <sub>D</sub> =7.0V, R <sub>L</sub> =100Ω	-	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
IН	R <sub>GK</sub> =1.0KΩ	-	5.0	-	5.0	-	5.0	-	5.0	mA
ton	V <sub>D</sub> = Rated V <sub>DRM</sub> , I <sub>GT</sub> =1.0mA, R <sub>GK</sub> =1.0KΩ, di/dt=6.0A/μs	2	.8 TYP	μs						

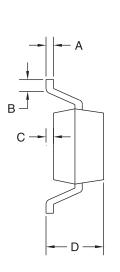
R10 (11-February 2011)

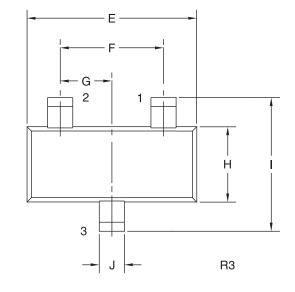




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## SOT-23 CASE - MECHANICAL OUTLINE





LEAD CODE:
1) Cathode
2) Gate
3) Anode

MARKING CODES: CMPS5061: P2A CMPS5062: P2B CMPS5063: P2C CMPS5064: P2D

DIMENSIONS						
	INC	HES	HES MILLIME			
SYMBOL	MIN	MAX	MIN	MAX		
А	0.003	0.007	0.08	0.18		
В	0.006	-	0.15	-		
С	-	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	0.0	)37	0.95			
Н	0.047	0.055	1.19	1.40		
	0.083	0.098	2.10	2.49		
J	0.014	0.020	0.35	0.50		

SOT-23 (REV: R3)

## R10 (11-February 2011)

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# **OUTSTANDING SUPPORT AND SUPERIOR SERVICES**

#### **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

#### **DESIGNER SUPPORT/SERVICES**

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

- Free quick ship samples (2<sup>nd</sup> day air)
- Online technical data and parametric search
- SPICE models
- Custom electrical curves
- Environmental regulation compliance
- Customer specific screening
- Up-screening capabilities

Special wafer diffusions

· Custom product packing

- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits

Custom bar coding for shipments

Custom product and package development

## **REQUESTING PRODUCT PLATING**

- 1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
- If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

#### CONTACT US

## **Corporate Headquarters & Customer Support Team**

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# Product End of Life Notification

PDN ID:	PDN01018
Notification Date:	1/29/16
Last Buy Date:	7/29/16
Last Shipment Date	1/29/17

Summary: The CMPS5061, CMPS5062, and CMPS5063 Silicon Controlled Rectifiers are being discontinued and are now classified as End of Life (EOL).

Although Central Semiconductor Corp. makes every effort to continue to produce devices that have been proclaimed EOL (End of Life) by various manufacturers, it is an accepted industry practice to discontinue certain devices when customer demand falls below a minimum level of sustainability. Accordingly, the following product(s) have been transitioned to End of Life status as part of Central's Product Management Process. Any replacement product will be noted below. The effective date for placing the last purchase order will be six(6) months from the date of this notice and twelve(12) months from the notice date for final shipments; this may be extended if inventory is available.

Central Part Number	Replacement		
CMPS5061 BK	CMPS5061 BK	Н	
CMPS5061 TR	CMPS5061 TR	Н	
CMPS5062 BK	CMPS5062 BK	Н	
CMPS5062 TR	CMPS5062 TR	Н	
CMPS5063 BK	CMPS5064 BK		
CMPS5063 TR	CMPS5064 TR		
CMPS5062 TR CMPS5063 BK	CMPS5062 TR CMPS5064 BK		

Central would be happy to assist you by providing additional information or technical data to help locate an alternate source if we have no replacement available. Please email your requests to engineering@centralsemi.com.

DISCLAIMER: This End of Life (EOL) notification is in accordance with JEDEC standard JESD48 - Product Discontinuance. Central Semiconductor Corp. will make every effort to offer life-time buy (LTB) opportunities and/or offer replacement devices to existing customers for discontinued devices, however, one or both may not be possible for all devices. Please contact your local Central Semiconductor sales representative for LTB opportunities/additional information.