

CMPS5064

400V, 0.8A Silicon Controlled Rectifier in the SOT-23



SOT-23

The CMPS5064 is an epoxy molded Silicon Controlled Rectifier manufactured in the SOT-23 case. This device meets the growing need for a 400V silicon controlled rectifier in a small SMD package. In addition to the high voltage capability, key attributes of the CMPS5064 are a low 0.8V gate trigger voltage with a low 200 μ A gate trigger current, and a fast on-state switching speed of 2.8 μ s.

Features:

- High reverse voltage capability (400V)
- High on-state current (0.8A)
- Low gate trigger voltage (0.8V)
- Low gate trigger current (200 μ A)
- Fast switching speed (2.8 μ s)

Applications:

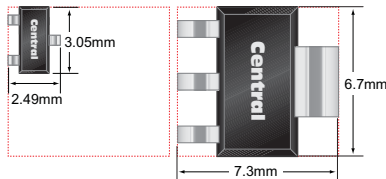
- Over-voltage protection
- Pulse generation
- Battery charging regulation

Benefits:

- High voltage SCR in the small SOT-23 package.

Package Comparisons:

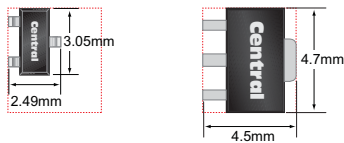
The SOT-23 utilizes **84%** less board space than the SOT-223



The SOT-23 has **39%** lower profile than the SOT-223



The SOT-23 utilizes **64%** less board space than the SOT-89



The SOT-23 has **36%** lower profile than the SOT-89

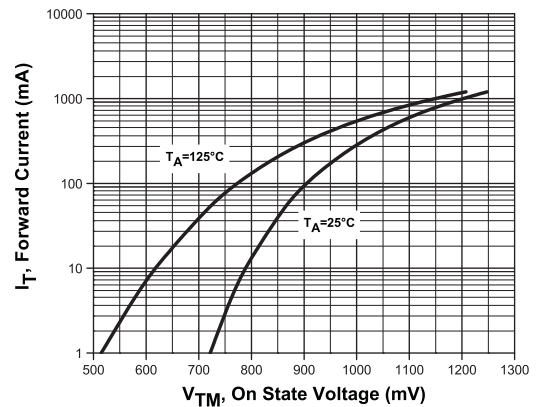


Electrical Ratings and Characteristics ($T_A = 25^\circ\text{C}$)

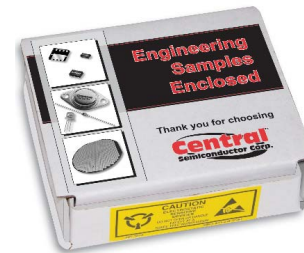
V_{RRM} (V)	$I_{T(RMS)}$ (A)	P_D (mW)	I_{GT} (μ A)	V_{GT} (V)	I_H (mA)	t_{on} (μ s)
MAX	MAX	MAX	MAX	MAX	MAX	TYP
400	0.8	350	200	0.8	5.0	2.8

Typical Electrical Characteristic

CMPS5064 Typical On State Characteristics



Samples and Literature

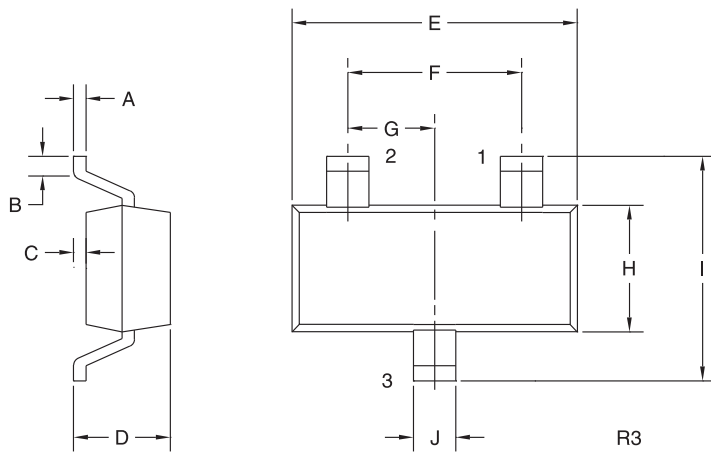


To order samples of this device visit:
www.centrasemi.com/info/CMPS5064



Order your selection guides today.
Visit: web.centrasemi.com/search/sample.php

Mechanical Drawing - SOT-23



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)

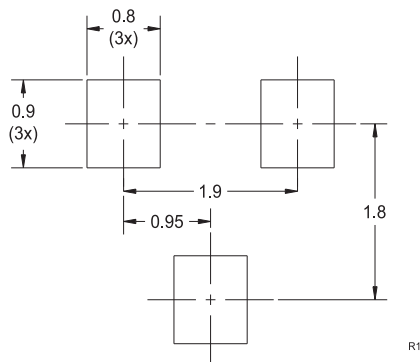
LEAD CODE:

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

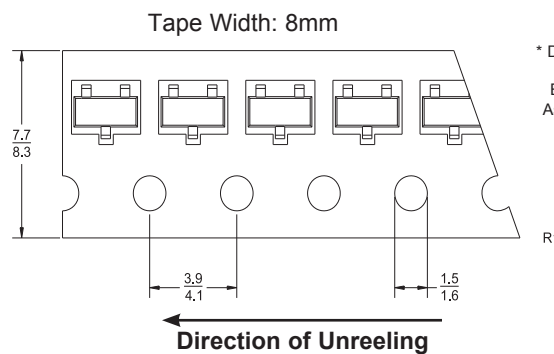
MARKING CODES:

CMPS5064: P2D

Mounting Pad Geometry (Dimensions in mm)



Tape Dimensions and Orientation (Dimensions in mm)



* Devices are taped in accordance with Electronic Industries Association Standard EIA-481-1-A

Packaging Base
 7" Reel = 3,000 pcs. (add TR suffix to part number)
 13" Reel = 10,000 pcs. (add TR13 suffix to part number)

Reel Packing Information

Reel Size	Reels per Box (Maximum)	Parts per Box (Maximum)	Box Dimensions		Shipping Weight (Max.)	
			INCH	CM	LB	KG
7"	3	9,000	8x7x2	20x18x5	1	1
	9	27,000	9x9x5	23x23x13	3	2
	18	54,000	9x9x9	23x23x23	6	3
	40	120,000	21x9x9	53x23x23	13	6
	108	324,000	27x9x17	69x23x43	34	16
13"	3	30,000	15x2x15	38x5x38	4	2
	6	60,000	15x4x15	38x10x38	6	3
	14	140,000	15x15x9	38x38x23	15	7
	26	260,000	15x15x18	38x38x46	28	13

Sample devices available upon request. To order samples of this device visit: www.centralsemi.com/info/CMPS5064



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www.centralsemi.com