

**CMPZ4678C THRU CMPZ4717C**

**SURFACE MOUNT  
LOW LEVEL SILICON ZENER DIODE  
350mW, 1.8 THRU 43 VOLT  
2% TOLERANCE**



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

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMPZ4678C series silicon Zener diode is a high quality voltage regulator designed for applications requiring an extremely low operating current and low leakage.

**MARKING CODES: CONSULT FACTORY**



**SOT-23 CASE**

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

Power Dissipation

Operating and Storage Temperature

**SYMBOL**

$P_D$

$T_J, T_{stg}$

350

-65 to +150

**UNITS**

mW

$^\circ\text{C}$

**ELECTRICAL CHARACTERISTICS:** ( $T_A=25^\circ\text{C}$ )  $V_F=1.5\text{V MAX @ } I_F=100\text{mA}$  (for all types)

TYPE	ZENER VOLTAGE			TEST CURRENT	MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT
	$V_Z @ I_{ZT}$			$I_{ZT}$	$I_R$	@ $V_R$	$I_{ZM}$
	MIN V	NOM V	MAX V	$\mu\text{A}$	$\mu\text{A}$	V	mA
CMPZ4678C	1.764	1.8	1.836	50	7.5	1.0	120.0
CMPZ4679C	1.960	2.0	2.040	50	5.0	1.0	110.0
CMPZ4680C	2.156	2.2	2.244	50	4.0	1.0	100.0
CMPZ4681C	2.352	2.4	2.448	50	2.0	1.0	95.0
CMPZ4682C	2.646	2.7	2.754	50	1.0	1.0	90.0
CMPZ4683C	2.940	3.0	3.060	50	0.8	1.0	85.0
CMPZ4684C	3.234	3.3	3.366	50	7.5	1.5	80.0
CMPZ4685C	3.528	3.6	3.672	50	7.5	2.0	75.0
CMPZ4686C	3.822	3.9	3.978	50	5.0	2.0	70.0
CMPZ4687C	4.214	4.3	4.386	50	4.0	2.0	65.0
CMPZ4688C	4.606	4.7	4.794	50	10	3.0	60.0
CMPZ4689C	4.998	5.1	5.202	50	10	3.0	55.0
CMPZ4690C	5.488	5.6	5.712	50	10	4.0	50.0
CMPZ4691C	6.076	6.2	6.324	50	10	5.0	45.0
CMPZ4692C	6.664	6.8	6.936	50	10	5.1	35.0
CMPZ4693C	7.350	7.5	7.650	50	10	5.7	31.8
CMPZ4694C	8.036	8.2	8.364	50	1.0	6.2	29.0
CMPZ4695C	8.526	8.7	8.874	50	1.0	6.6	27.4
CMPZ4696C	8.918	9.1	9.282	50	1.0	6.9	26.2
CMPZ4697C	9.800	10	10.20	50	1.0	7.6	24.8
CMPZ4698C	10.78	11	11.22	50	0.05	8.4	21.6

**CMPZ4678C THRU CMPZ4717C**

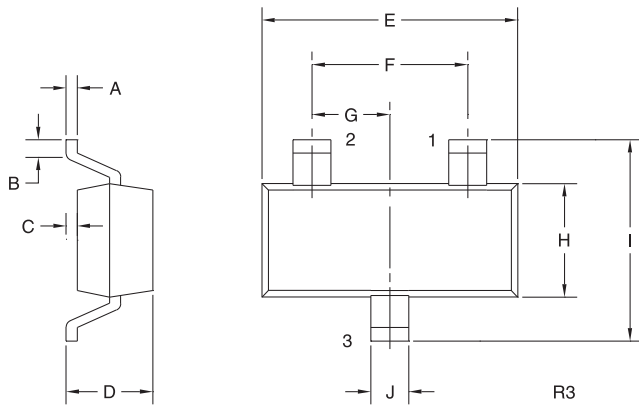
**SURFACE MOUNT  
LOW LEVEL SILICON ZENER DIODE  
350mW, 1.8 THRU 43 VOLT  
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**ELECTRICAL CHARACTERISTICS - Continued:** ( $T_A=25^\circ\text{C}$ )  $V_F=1.5\text{V MAX @ } I_F=100\text{mA}$  (for all types)

TYPE	ZENER VOLTAGE			TEST CURRENT $I_{ZT}$	MAXIMUM REVERSE CURRENT		MAXIMUM ZENER CURRENT $I_{ZM}$
	$V_Z @ I_{ZT}$				$I_R$	@ $V_R$	
	MIN V	NOM V	MAX V	$\mu\text{A}$	$\mu\text{A}$	V	mA
CMPZ4699C	11.76	12	12.24	50	0.05	9.1	20.4
CMPZ4700C	12.74	13	13.26	50	0.05	9.8	19.0
CMPZ4701C	13.72	14	14.28	50	0.05	10.6	17.5
CMPZ4702C	14.70	15	15.30	50	0.05	11.4	16.3
CMPZ4703C	15.68	16	16.32	50	0.05	12.1	15.4
CMPZ4704C	16.66	17	17.34	50	0.05	12.9	14.5
CMPZ4705C	17.64	18	18.36	50	0.05	13.6	13.2
CMPZ4706C	18.62	19	19.38	50	0.05	14.4	12.5
CMPZ4707C	19.60	20	20.40	50	0.01	15.2	11.9
CMPZ4708C	21.56	22	22.44	50	0.01	16.7	10.8
CMPZ4709C	23.52	24	24.48	50	0.01	18.2	9.9
CMPZ4710C	24.50	25	25.50	50	0.01	19.0	9.5
CMPZ4711C	26.46	27	27.54	50	0.01	20.4	8.8
CMPZ4712C	27.44	28	28.56	50	0.01	21.2	8.5
CMPZ4713C	29.40	30	30.60	50	0.01	22.8	7.9
CMPZ4714C	32.34	33	33.66	50	0.01	25.0	7.2
CMPZ4715C	35.28	36	36.72	50	0.01	27.3	6.6
CMPZ4716C	38.22	39	39.78	50	0.01	29.6	6.1
CMPZ4717C	42.14	43	43.86	50	0.01	32.6	5.5

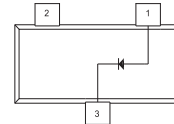
**SOT-23 CASE - MECHANICAL OUTLINE**



SYMBOL	DIMENSIONS			
	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) Anode  
2) No Connection  
3) Cathode



R0 (3-February 2015)

## OUTSTANDING SUPPORT AND SUPERIOR SERVICES



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### 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
- Custom bar coding for shipments
- Custom product packing

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### 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
- PbSn plating options
- Package details
- Application notes
- Application and design sample kits
- Custom product and package development

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### 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).
2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

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### CONTACT US

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