

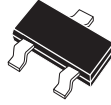
**CMPZ4678  
 THRU  
 CMPZ4717  
 SURFACE MOUNT  
 350mW LOW LEVEL  
 SILICON ZENER DIODE  
 5% TOLERANCE**

**Central™  
 Semiconductor Corp.**

**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMPZ4678 Series silicon zener diode is a high quality voltage regulator designed for applications requiring an extremely low operating current and low leakage.

**MARKING CODE: 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 NO.	NOMINAL ZENER VOLTAGE $V_Z @ I_{ZT}$	TEST CURRENT $I_{ZT}$	MAXIMUM REVERSE LEAKAGE CURRENT $I_R @ V_R$		MAXIMUM VOLTAGE CHANGE** $\Delta V_Z$	MAXIMUM ZENER CURRENT $I_{ZM}$
	VOLTS	$\mu\text{A}$	$\mu\text{A}$	VOLTS	VOLTS	mA
CMPZ4678	1.8	50	7.5	1.0	0.70	120.0
CMPZ4679*	2.0	50	5.0	1.0	0.70	110.0
CMPZ4680*	2.2	50	4.0	1.0	0.75	100.0
CMPZ4681*	2.4	50	2.0	1.0	0.80	95.0
CMPZ4682	2.7	50	1.0	1.0	0.85	90.0
CMPZ4683	3.0	50	0.8	1.0	0.90	85.0
CMPZ4684	3.3	50	7.5	1.5	0.95	80.0
CMPZ4685	3.6	50	7.5	2.0	0.95	75.0
CMPZ4686	3.9	50	5.0	2.0	0.97	70.0
CMPZ4687	4.3	50	4.0	2.0	0.99	65.0
CMPZ4688	4.7	50	10	3.0	0.99	60.0
CMPZ4689	5.1	50	10	3.0	0.97	55.0
CMPZ4690	5.6	50	10	4.0	0.96	50.0
CMPZ4691	6.2	50	10	5.0	0.95	45.0
CMPZ4692	6.8	50	10	5.1	0.90	35.0
CMPZ4693	7.5	50	10	5.7	0.75	31.8
CMPZ4694	8.2	50	1.0	6.2	0.50	29.0
CMPZ4695	8.7	50	1.0	6.6	0.10	27.4
CMPZ4696	9.1	50	1.0	6.9	0.08	26.2
CMPZ4697	10	50	1.0	7.6	0.10	24.8
CMPZ4698	11	50	0.05	8.4	0.11	21.6

\* Available on special order only, please consult factory. \*\* $\Delta V_Z=V_Z @ 100\mu\text{A}$  MINUS  $V_Z @ 10\mu\text{A}$ .

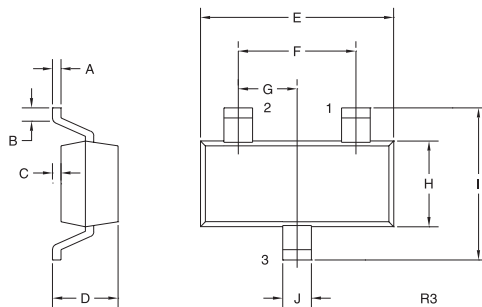
ELECTRICAL CHARACTERISTICS: ( $T_A=25^\circ\text{C}$ )  $V_F=1.5\text{V MAX @ } I_F=100\text{mA}$  FOR ALL TYPES.

TYPE NO.	NOMINAL ZENER VOLTAGE $V_Z @ I_{ZT}$	TEST CURRENT $I_{ZT}$	MAXIMUM REVERSE LEAKAGE CURRENT $I_R @ V_R$		MAXIMUM VOLTAGE CHANGE** $\Delta V_Z$	MAXIMUM ZENER CURRENT $I_{ZM}$
	VOLTS	$\mu\text{A}$	$\mu\text{A}$	VOLTS	VOLTS	mA
CMPZ4699	12	50	0.05	9.1	0.12	20.4
CMPZ4700	13	50	0.05	9.8	0.13	19.0
CMPZ4701	14	50	0.05	10.6	0.14	17.5
CMPZ4702	15	50	0.05	11.4	0.15	16.3
CMPZ4703	16	50	0.05	12.1	0.16	15.4
CMPZ4704	17	50	0.05	12.9	0.17	14.5
CMPZ4705	18	50	0.05	13.6	0.18	13.2
CMPZ4706	19	50	0.05	14.4	0.19	12.5
CMPZ4707	20	50	0.01	15.2	0.20	11.9
CMPZ4708	22	50	0.01	16.7	0.22	10.8
CMPZ4709	24	50	0.01	18.2	0.24	9.9
CMPZ4710	25	50	0.01	19.0	0.25	9.5
CMPZ4711	27	50	0.01	20.4	0.27	8.8
CMPZ4712	28	50	0.01	21.2	0.28	8.5
CMPZ4713	30	50	0.01	22.8	0.30	7.9
CMPZ4714	33	50	0.01	25.0	0.33	7.2
CMPZ4715	36	50	0.01	27.3	0.36	6.6
CMPZ4716*	39	50	0.01	29.6	0.39	6.1
CMPZ4717*	43	50	0.01	32.6	0.43	5.5

\* Available on special order only, please consult factory.

\*\* $\Delta V_Z = V_Z @ 100\mu\text{A}$  MINUS  $V_Z @ 10\mu\text{A}$ .

### SOT-23 CASE - MECHANICAL OUTLINE

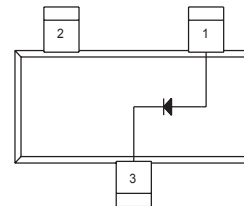


MARKING CODE:  
CONSULT FACTORY

SYMBOL	DIMENSIONS		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)

### PINOUT



LEAD CODE:

- 1) ANODE
- 2) NO CONNECTION
- 3) CATHODE

R6 (4-March 2004)