

CMZ5334B THRU CMZ5388B

**SURFACE MOUNT SILICON
HIGH POWER ZENER DIODES
5.0 WATT, 3.6 THRU 200 VOLT
±5% TOLERANCE**



SMC CASE



www.centrasemi.com

DESCRIPTION:

The CENTRAL SEMICONDUCTOR CMZ5334B series silicon Zener diodes are voltage regulators, manufactured in an epoxy molded surface mount package, and designed for use in industrial, commercial, entertainment and computer applications.

MARKING: SEE MARKING CODE ON ELECTRICAL CHARACTERISTICS TABLE

MAXIMUM RATINGS:

Power Dissipation ($T_L=50^\circ\text{C}$)
Power Dissipation ($T_L=100^\circ\text{C}$)
Power Dissipation ($T_A=25^\circ\text{C}$) (Note 1)
Operating Junction Temperature
Storage Temperature
Thermal Resistance
Thermal Resistance (Note 1)

SYMBOL

P_D 10
 P_D 5.0
 P_D 2.0
 T_J -65 to +150
 T_{stg} -65 to +200
 θ_{JL} 10
 θ_{JA} 62.5

UNITS

W
W
W
 $^\circ\text{C}$
 $^\circ\text{C}$
 $^\circ\text{C/W}$
 $^\circ\text{C/W}$

ELECTRICAL CHARACTERISTICS: ($T_A=25^\circ\text{C}$) $V_F=1.2\text{V MAX}$ @ $I_F=1.0\text{A}$ (for all types)

TYPE	ZENER VOLTAGE V _Z @ I _{ZT}			TEST CURRENT I _{ZT}	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM SURGE CURRENT (Note 2)	MAXIMUM VOLTAGE REGULATION (Note 3)	MAXIMUM REGULATOR CURRENT (T _L =75°C)	MARKING CODE
	MIN	NOM	MAX		Z _{ZT} @ I _{ZT}	Z _{ZK} @ I _{ZK}		I _R @ V _R					
	V	V	V		Ω	Ω	mA	μA	V				
CMZ5334B	3.420	3.6	3.780	350	3.0	500	1.0	150	1.0	18.7	0.80	1320	C5334B
CMZ5335B	3.705	3.9	4.095	320	2.0	500	1.0	50	1.0	17.6	0.54	1220	C5335B
CMZ5336B	4.085	4.3	4.515	290	2.0	500	1.0	10	1.0	16.4	0.49	1100	C5336B
CMZ5337B	4.465	4.7	4.935	264	2.0	450	1.0	10	1.0	15.3	0.44	1010	C5337B
CMZ5338B	4.845	5.1	5.355	240	2.0	400	1.0	10	1.0	14.4	0.39	930	C5338B
CMZ5339B	5.320	5.6	5.880	220	1.0	400	1.0	10	2.0	13.4	0.25	865	C5339B
CMZ5340B	5.700	6.0	6.300	200	1.0	300	1.0	10	3.0	12.7	0.25	790	C5340B
CMZ5342B	6.460	6.8	7.140	175	1.0	200	1.0	100	5.2	11.5	0.15	700	C5342B
CMZ5343B	7.125	7.5	7.875	175	1.5	200	1.0	100	5.7	10.7	0.15	630	C5343B
CMZ5344B	7.790	8.2	8.610	150	1.5	200	1.0	100	6.2	10.0	0.20	580	C5344B
CMZ5345B	8.265	8.7	9.135	150	2.0	200	1.0	100	6.6	7.5	0.20	545	C5345B
CMZ5346B	8.645	9.1	9.555	150	2.0	150	1.0	7.5	6.9	9.2	0.22	520	C5346B
CMZ5347B	9.500	10	10.50	125	2.0	125	1.0	5.0	7.6	8.6	0.22	475	C5347B
CMZ5348B	10.45	11	11.55	125	2.5	125	1.0	5.0	8.4	8.0	0.25	430	C5348B
CMZ5349B	11.40	12	12.60	100	2.5	125	1.0	2.0	9.1	7.5	0.25	395	C5349B
CMZ5350B	12.35	13	13.65	100	2.5	100	1.0	1.0	9.9	7.0	0.25	365	C5350B
CMZ5351B	13.30	14	14.70	100	2.5	75	1.0	1.0	10.6	6.7	0.25	340	C5351B
CMZ5352B	14.25	15	15.75	75	2.5	75	1.0	1.0	11.5	6.3	0.25	315	C5352B
CMZ5353B	15.20	16	16.80	75	2.5	75	1.0	1.0	12.2	6.0	0.30	295	C5353B
CMZ5354B	16.15	17	17.85	70	2.5	75	1.0	0.5	12.9	5.8	0.35	280	C5354B
CMZ5355B	17.10	18	18.90	65	2.5	75	1.0	0.5	13.7	5.5	0.40	264	C5355B
CMZ5356B	18.05	19	19.95	65	3.0	75	1.0	0.5	14.4	5.3	0.40	250	C5356B
CMZ5357B	19.00	20	21.00	65	3.0	75	1.0	0.5	15.2	5.1	0.40	237	C5357B
CMZ5358B	20.90	22	23.10	50	3.5	75	1.0	0.5	16.7	4.7	0.45	216	C5358B

R14 (9-March 2015)

CMZ5334B THRU CMZ5388B

**SURFACE MOUNT SILICON
HIGH POWER ZENER DIODES
5.0 WATT, 3.6 THRU 200 VOLT
±5% TOLERANCE**



ELECTRICAL CHARACTERISTICS - Continued: ($T_A=25^\circ\text{C}$) $V_F=1.2\text{V MAX @ } I_F=1.0\text{A}$ (for all types)

TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT I_{ZT}	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAXIMUM SURGE CURRENT (Note 2)	MAXIMUM VOLTAGE REGULATION (Note 3)	MAXIMUM REGULATOR CURRENT ($T_L=75^\circ\text{C}$)	MARKING CODE
	MIN	NOM	MAX		$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$	$I_R @ V_R$						
	V	V	V		Ω	Ω	μA	V	A	V	mA		
CMZ5359B	22.80	24	25.20	50	3.5	100	1.0	0.5	18.2	4.4	0.55	198	C5359B
CMZ5360B	23.75	25	26.25	50	4.0	110	1.0	0.5	19.0	4.3	0.55	190	C5360B
CMZ5361B	25.65	27	28.35	50	5.0	120	1.0	0.5	20.6	4.1	0.60	176	C5361B
CMZ5362B	26.60	28	29.40	50	6.0	130	1.0	0.5	21.2	3.9	0.60	170	C5362B
CMZ5363B	28.50	30	31.50	40	8.0	140	1.0	0.5	22.8	3.7	0.60	158	C5363B
CMZ5364B	31.35	33	34.65	40	10	150	1.0	0.5	25.1	3.5	0.65	144	C5364B
CMZ5365B	34.20	36	37.80	30	11	160	1.0	0.5	27.4	3.3	0.65	132	C5365B
CMZ5366B	37.05	39	40.95	30	14	170	1.0	0.5	29.7	3.1	0.65	122	C5366B
CMZ5367B	40.85	43	45.15	30	20	190	1.0	0.5	32.7	2.8	0.70	110	C5367B
CMZ5368B	44.65	47	49.35	25	25	210	1.0	0.5	35.8	2.7	0.80	100	C5368B
CMZ5369B	48.45	51	53.55	25	27	230	1.0	0.5	38.8	2.5	0.90	93.0	C5369B
CMZ5370B	53.20	56	58.80	20	35	280	1.0	0.5	42.6	2.3	1.00	86.0	C5370B
CMZ5371B	57.00	60	63.00	20	40	350	1.0	0.5	45.5	2.2	1.20	79.0	C5371B
CMZ5372B	58.90	62	65.10	20	42	400	1.0	0.5	47.1	2.1	1.35	76.0	C5372B
CMZ5373B	64.60	68	71.40	20	44	500	1.0	0.5	51.7	2.0	1.50	70.0	C5373B
CMZ5374B	71.25	75	78.75	20	45	620	1.0	0.5	56.0	1.9	1.60	63.0	C5374B
CMZ5375B	77.90	82	86.10	15	65	720	1.0	0.5	62.2	1.8	1.80	58.0	C5375B
CMZ5376B	82.65	87	91.35	15	75	760	1.0	0.5	66.0	1.7	2.00	54.5	C5376B
CMZ5377B	86.45	91	95.55	15	75	760	1.0	0.5	69.2	1.6	2.20	52.5	C5377B
CMZ5378B	95.00	100	105.0	12	90	800	1.0	0.5	76.0	1.5	2.50	47.5	C5378B
CMZ5379B	104.5	110	115.5	12	125	1000	1.0	0.5	83.6	1.4	2.50	43.0	C5379B
CMZ5380B	114.0	120	126.0	10	170	1150	1.0	0.5	91.2	1.3	2.50	39.5	C5380B
CMZ5381B	123.5	130	136.5	10	190	1250	1.0	0.5	98.8	1.2	2.50	36.6	C5381B
CMZ5382B	133.0	140	147.0	8.0	230	1500	1.0	0.5	106	1.2	2.50	34.0	C5382B
CMZ5383B	142.5	150	157.5	8.0	330	1500	1.0	0.5	114	1.1	3.00	31.6	C5383B
CMZ5384B	152.0	160	168.0	8.0	350	1650	1.0	0.5	122	1.1	3.00	29.4	C5384B
CMZ5385B	161.5	170	178.5	8.0	380	1750	1.0	0.5	129	1.0	3.00	28.0	C5385B
CMZ5386B	171.0	180	189.0	5.0	430	1750	1.0	0.5	137	1.0	4.00	26.4	C5386B
CMZ5387B	180.5	190	199.5	5.0	450	1850	1.0	0.5	144	0.9	5.00	25.0	C5387B
CMZ5388B	190.0	200	210.0	5.0	480	1850	1.0	0.5	152	0.9	5.00	23.6	C5388B

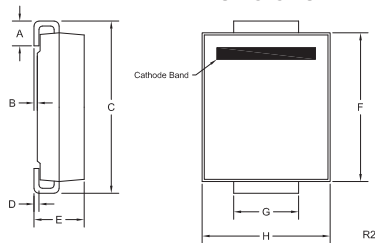
Notes: (1) Mounted on 2 inch square FR-4 PCB with minimum recommended SMC copper pad area.

(2) Surge Current (i_p) - Maximum allowable peak, non-recurrent square wave current ($t_p=8.3\text{ms}$).

(3) Voltage Regulation (ΔV_Z) - V_Z Measurements are made at 10% and then at 50% of the I_Z max value listed in the electrical characteristics table.

The test current time duration for each V_Z measurement is $40\pm 10\text{ms}$ ($T_A=25^\circ\text{C}$).

SMC CASE - MECHANICAL OUTLINE



SYMBOL	DIMENSIONS			
	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.030	0.060	0.76	1.52
B	0.002	0.008	0.05	0.20
C	0.305	0.320	7.75	8.13
D	0.006	0.012	0.15	0.31
E	0.079	0.103	2.00	2.62
F	0.260	0.280	6.60	7.11
G	0.108	0.128	2.75	3.25
H	0.220	0.245	5.59	6.22

SMC (REV: R2)

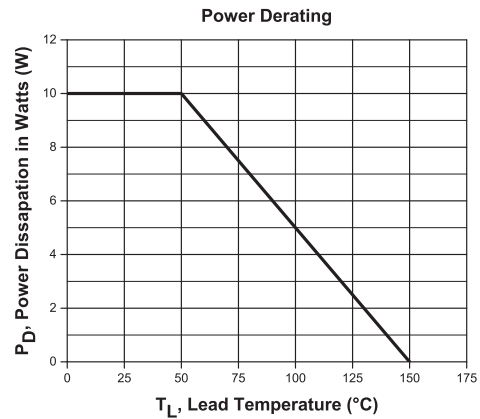
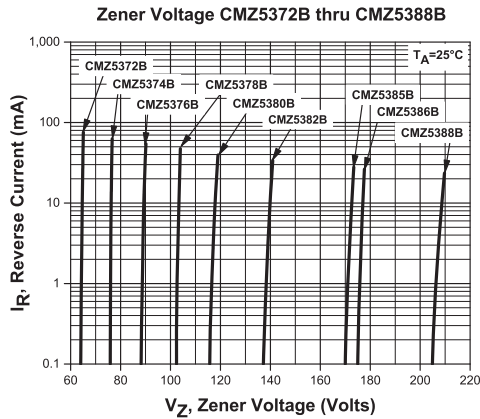
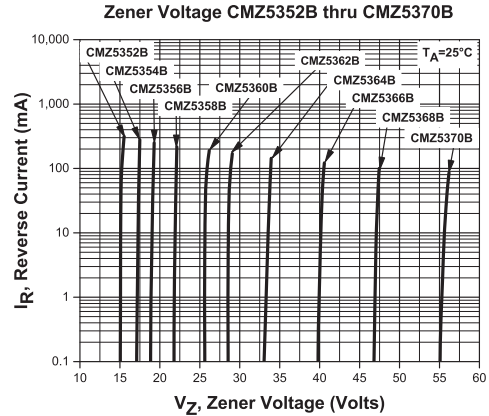
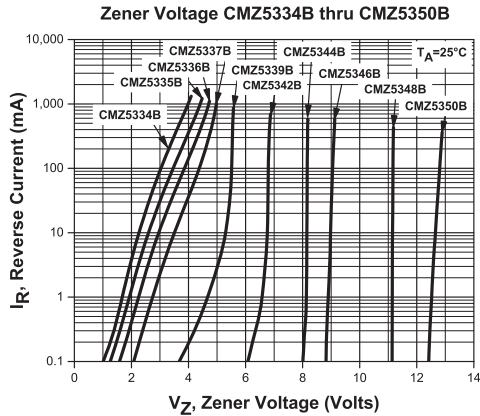
R14 (9-March 2015)

CMZ5334B THRU CMZ5388B

SURFACE MOUNT SILICON
HIGH POWER ZENER DIODES
5.0 WATT, 3.6 THRU 200 VOLT
±5% TOLERANCE



TYPICAL ELECTRICAL CHARACTERISTICS



R14 (9-March 2015)

CMZ5334B THRU CMZ5388B

**SURFACE MOUNT SILICON
HIGH POWER ZENER DIODES
5.0 WATT, 3.6 THRU 200 VOLT
±5% TOLERANCE**



SERVICES

- Bonded Inventory
- Custom Electrical Screening
- Custom Electrical Characteristic Curves
- SPICE Models
- Custom Packaging
- Package Base Options
- Custom Device Development/ Multi Discrete Modules (MDM™)
- Bare Die Available for Hybrid Applications

LIMITATIONS AND DAMAGES DISCLAIMER: In no event shall Central be liable for any collateral, indirect, punitive, incidental, consequential, or exemplary damages in connection with or arising out of a purchase order or contract or the use of products provided hereunder, regardless of whether Central has been advised of the possibility of such damages. Excluded damages shall include, but not be restricted to: cost of removal or reinstallation, rework, ancillary costs to the procurement of substitute products, loss of profits, loss of savings, loss of use, loss of data, or business interruption. No claim, suit, or action shall be brought against Central more than two (2) years after the related cause of action has occurred.

In no event shall Central's aggregate liability from any warranty, indemnity, or other obligation arising out of or in connection with a purchase order or contract, or any use of any Central product provided hereunder, exceed the total amount paid to Central for the specific products sold under a purchase order or contract with respect to which losses or damages are claimed. The existence of more than one (1) claim against the specific products sold to Buyer under a purchase order or contract shall not enlarge or extend this limit.

Buyer understands and agrees that the foregoing liability limitations are essential elements of a purchase order or contract and that in the absence of such limitations, the material and economic terms of the purchase order or contract would be substantially different.

R14 (9-March 2015)



Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)

Факс: 8 (812) 320-02-42

Электронная почта: org@eplast1.ru

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.