

CMKZ5221B THRU CMKZ5261B

**SURFACE MOUNT
TRIPLE ISOLATED
SILICON ZENER DIODES
5% TOLERANCE**

ULTRAmini™**SOT-363 CASE**www.centrasemi.com**DESCRIPTION:**

The CENTRAL SEMICONDUCTOR CMKZ5221B Series contains three (3) isolated Silicon Zener Diodes packaged in an ULTRAmini™ SOT-363 surface mount case, designed for use in industrial, commercial, entertainment and computer applications. Higher voltage devices are available on special order.

MARKING CODE: SEE MARKING CODES ON ELECTRICAL CHARACTERISTICS TABLE**MAXIMUM RATINGS:** ($T_A=25^\circ\text{C}$)

Power Dissipation

Operating and Storage Junction Temperature

Thermal Resistance

SYMBOL P_D T_J, T_{stg} θ_{JA}

200

-65 to +150

625

UNITS

mW

 $^\circ\text{C}$ $^\circ\text{C/W}$ **ELECTRICAL CHARACTERISTICS PER DIODE:** ($T_A=25^\circ\text{C}$) $V_F=0.9\text{V MAX @ } I_F=10\text{mA}$ (for all types)

TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAX. TEMP. COEFF.	MARK. CODE
	MIN	NOM	MAX	I_{ZT}	$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$		$I_R @ V_R$		θV_Z	
	V	V	V	mA	Ω	Ω	mA	μA	V	%/ $^\circ\text{C}$	
CMKZ5221B	2.280	2.4	2.520	20	30	1200	0.25	100	1.0	-0.085	8A1T
CMKZ5222B	2.375	2.5	2.625	20	30	1250	0.25	100	1.0	-0.085	8B1T
CMKZ5223B	2.565	2.7	2.835	20	30	1300	0.25	75	1.0	-0.080	8C1T
CMKZ5224B	2.660	2.8	2.940	20	30	1400	0.25	75	1.0	-0.080	8D1T
CMKZ5225B	2.850	3.0	3.150	20	29	1600	0.25	50	1.0	-0.075	8E1T
CMKZ5226B	3.135	3.3	3.465	20	28	1600	0.25	25	1.0	-0.070	8ACT
CMKZ5227B	3.420	3.6	3.780	20	24	1700	0.25	15	1.0	-0.065	8BCT
CMKZ5228B	3.705	3.9	4.095	20	23	1900	0.25	10	1.0	-0.060	8CCT
CMKZ5229B	4.085	4.3	4.515	20	22	2000	0.25	5.0	1.0	± 0.055	8DCT
CMKZ5230B	4.465	4.7	4.935	20	19	1900	0.25	5.0	2.0	± 0.030	8ECT
CMKZ5231B	4.845	5.1	5.335	20	17	1600	0.25	5.0	2.0	± 0.030	8FCT
CMKZ5232B	5.320	5.6	5.880	20	11	1600	0.25	5.0	3.0	+0.038	8GCT
CMKZ5233B	5.700	6.0	6.300	20	7.0	1600	0.25	5.0	3.5	+0.038	8HCT
CMKZ5234B	5.890	6.2	6.510	20	7.0	1000	0.25	3.0	4.0	+0.045	8JCT
CMKZ5235B	6.460	6.8	7.140	20	5.0	750	0.25	3.0	5.0	+0.050	8KCT
CMKZ5236B	7.125	7.5	7.875	20	6.0	500	0.25	3.0	6.0	+0.058	8LCT
CMKZ5237B	7.790	8.2	8.610	20	8.0	500	0.25	3.0	6.5	+0.062	8MCT
CMKZ5238B	8.265	8.7	9.135	20	8.0	600	0.25	3.0	6.5	+0.065	8NCT
CMKZ5239B	8.645	9.1	9.555	20	10	600	0.25	3.0	7.0	+0.068	8PCT

R2 (13-January 2010)

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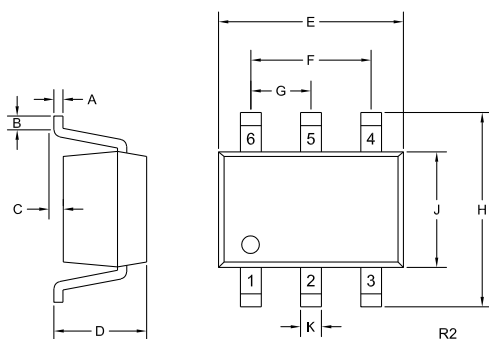
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ELECTRICAL CHARACTERISTICS - Continued: ($T_A=25^\circ\text{C}$) $V_F=0.9\text{V MAX @ } I_F=10\text{mA}$ (for all types)

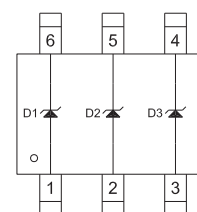
TYPE	ZENER VOLTAGE $V_Z @ I_{ZT}$			TEST CURRENT I_{ZT}	MAXIMUM ZENER IMPEDANCE			MAXIMUM REVERSE CURRENT		MAX. TEMP. COEFF. θV_Z	MARK. CODE
	MIN	NOM	MAX		$Z_{ZT} @ I_{ZT}$	$Z_{ZK} @ I_{ZK}$		$I_R @ V_R$			
	V	V	V		Ω	Ω	mA	μA	V	% $^\circ\text{C}$	
CMKZ5240B	9.500	10	10.50	20	17	600	0.25	3.0	8.0	+0.075	8QCT
CMKZ5241B	10.45	11	11.55	20	22	600	0.25	2.0	8.4	+0.076	8RCT
CMKZ5242B	11.40	12	12.60	20	30	600	0.25	1.0	9.1	+0.077	8SCT
CMKZ5243B	12.35	13	13.65	9.5	13	600	0.25	0.5	9.9	+0.079	8TCT
CMKZ5244B	13.30	14	14.70	9.0	15	600	0.25	0.1	10	+0.082	8UCT
CMKZ5245B	14.25	15	15.75	8.5	16	600	0.25	0.1	11	+0.082	8VCT
CMKZ5246B	15.20	16	16.80	7.8	17	600	0.25	0.1	12	+0.083	8WCT
CMKZ5247B	16.15	17	17.85	7.4	19	600	0.25	0.1	13	+0.084	8XCT
CMKZ5248B	17.10	18	18.90	7.0	21	600	0.25	0.1	14	+0.085	8YCT
CMKZ5249B	18.05	19	19.95	6.6	23	600	0.25	0.1	14	+0.086	8ZCT
CMKZ5250B	19.00	20	21.00	6.2	25	600	0.25	0.1	15	+0.086	1A8T
CMKZ5251B	20.90	22	23.10	5.6	29	600	0.25	0.1	17	+0.087	1B8T
CMKZ5252B	22.80	24	25.20	5.2	33	600	0.25	0.1	18	+0.088	1C8T
CMKZ5253B	23.75	25	26.25	5.0	35	600	0.25	0.1	19	+0.089	1D8T
CMKZ5254B	25.65	27	28.35	4.6	41	600	0.25	0.1	21	+0.090	1E8T
CMKZ5255B	26.60	28	29.40	4.5	44	600	0.25	0.1	21	+0.091	1F8T
CMKZ5256B	28.50	30	31.60	4.2	49	600	0.25	0.1	23	+0.091	1G8T
CMKZ5257B	31.35	33	34.65	3.8	58	700	0.25	0.1	25	+0.092	1H8T
CMKZ5258B	34.20	36	37.80	3.4	70	700	0.25	0.1	27	+0.093	1J8T
CMKZ5259B	37.05	39	40.95	3.2	80	800	0.25	0.1	30	+0.094	1K8T
CMKZ5260B	40.85	43	45.15	3.0	93	900	0.25	0.1	33	+0.095	1L8T
CMKZ5261B	44.65	47	49.35	2.7	105	1000	0.25	0.1	36	+0.095	1M8T

SOT-363 CASE - MECHANICAL OUTLINE



SYMBOL	INCHES		MILLIMETERS	
	MIN	MAX	MIN	MAX
A	0.004	0.010	0.10	0.25
B	0.005	-	0.12	-
C	0.000	0.004	0.00	0.10
D	0.031	0.043	0.80	1.10
E	0.071	0.087	1.80	2.20
F	0.051		1.30	
G	0.026		0.65	
H	0.075	0.091	1.90	2.30
J	0.043	0.055	1.10	1.40
K	0.006	0.012	0.15	0.30

SOT-363 (REV: R2)



LEAD CODE:

- 1) Anode D1
- 2) Anode D2
- 3) Anode D3
- 4) Cathode D3
- 5) Cathode D2
- 6) Cathode D1

R2 (13-January 2010)

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
- Custom bar coding for shipments
- Custom product packing

DESIGNER SUPPORT/SERVICES

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

- Free quick ship samples (2nd 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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<u>CMKZ5221B TR</u>	<u>CMKZ5222B TR</u>	<u>CMKZ5223B TR</u>	<u>CMKZ5224B TR</u>	<u>CMKZ5225B TR</u>	<u>CMKZ5226B TR</u>
<u>CMKZ5227B TR</u>	<u>CMKZ5228B TR</u>	<u>CMKZ5229B TR</u>	<u>CMKZ5230B TR</u>	<u>CMKZ5231B TR</u>	<u>CMKZ5232B TR</u>
<u>CMKZ5233B TR</u>	<u>CMKZ5234B TR</u>	<u>CMKZ5235B TR</u>	<u>CMKZ5236B TR</u>	<u>CMKZ5237B TR</u>	<u>CMKZ5238B TR</u>
<u>CMKZ5239B TR</u>	<u>CMKZ5240B TR</u>	<u>CMKZ5241B TR</u>	<u>CMKZ5242B TR</u>	<u>CMKZ5243B TR</u>	<u>CMKZ5244B TR</u>
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<u>CMKZ5251B TR</u>	<u>CMKZ5252B TR</u>	<u>CMKZ5253B TR</u>	<u>CMKZ5254B TR</u>	<u>CMKZ5255B TR</u>	<u>CMKZ5256B TR</u>
<u>CMKZ5257B TR</u>	<u>CMKZ5258B TR</u>	<u>CMKZ5259B TR</u>	<u>CMKZ5260B TR</u>	<u>CMKZ5261B TR</u>	