

# ZMC RD...S Series

## ZENER DIODES

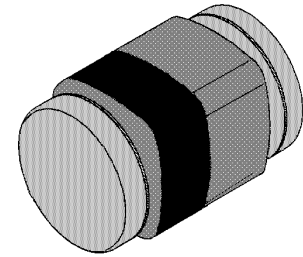
LS-31

### Features

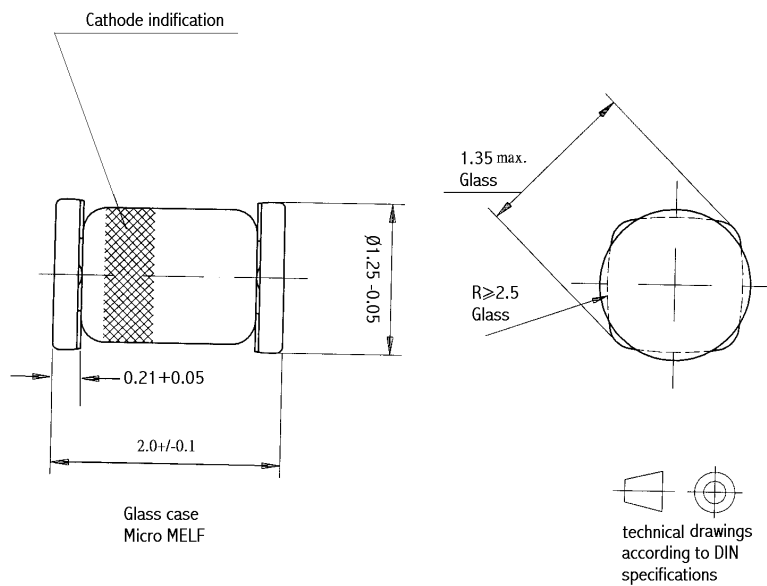
- Sharp Breakdown characteristic
- Vz: Applied E24 standard.

### Applications

- Circuits for Constant Voltage, Constant Current  
Wave form clipper, Surge absorber, etc

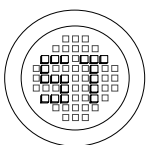


### Dimensions in mm



### Absolute Maximum Ratings ( $T_a = 25\text{ }^\circ\text{C}$ )

Parameter	Symbol	Value	Unit
Power Dissipation	$P_{tot}$	200	mW
Forward Current	$I_F$	100	mA
Reverse Surge Power (at $t = 10\text{ }\mu\text{s} / 1\text{ pulse}$ )	$P_{RSM}$	85	W
Junction Temperature	$T_j$	150	$^\circ\text{C}$
Storage Temperature Range	$T_s$	- 55 to + 150	$^\circ\text{C}$



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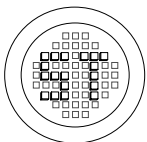


Dated : 17/05/2006

# ZMCRD...S Series

## Characteristics at T<sub>a</sub> = 25 °C

Type	Zener Voltage			Dynamic Impedance		Reverse Current	
	V <sub>Z</sub> (V) <sup>1)</sup>			Z <sub>Z</sub> (Ω) <sup>2)</sup>		I <sub>R</sub> (μA)	
	Min.	Max.	I <sub>Z</sub> (mA)	Max.	I <sub>Z</sub> (mA)	Max.	V <sub>R</sub> (V)
ZMCRD2V0SB	1.8	2.15	5	100	5	120	0.5
ZMCRD2V2SB	2.1	2.4	5	100	5	120	0.7
ZMCRD2V4SB	2.3	2.6	5	100	5	120	1
ZMCRD2V7SB	2.5	2.9	5	110	5	120	1
ZMCRD2V7SB1	2.5	2.75					
ZMCRD2V7SB2	2.65	2.9					
ZMCRD3V0SB	2.8	3.2	5	120	5	50	1
ZMCRD3V0SB1	2.8	3.05					
ZMCRD3V0SB2	2.95	3.2					
ZMCRD3V3SB	3.1	3.5	5	130	5	20	1
ZMCRD3V3SB1	3.1	3.35					
ZMCRD3V3SB2	3.25	3.5					
ZMCRD3V6SB	3.4	3.8	5	130	5	10	1
ZMCRD3V6SB1	3.4	3.65					
ZMCRD3V6SB2	3.55	3.8					
ZMCRD3V9SB	3.7	4.1	5	130	5	10	1
ZMCRD3V9SB1	3.7	3.97					
ZMCRD3V9SB2	3.87	4.1					
ZMCRD4V3SB	4	4.49	5	130	5	10	1
ZMCRD4V3SB1	4	4.22					
ZMCRD4V3SB2	4.14	4.35					
ZMCRD4V3SB3	4.27	4.49	5	130	5	10	1
ZMCRD4V7SB	4.4	4.92					
ZMCRD4V7SB1	4.4	4.63					
ZMCRD4V7SB2	4.53	4.77	5	130	5	10	1
ZMCRD4V7SB3	4.67	4.92					
ZMCRD5V1SB	4.82	5.39					
ZMCRD5V1SB1	4.82	5.06					
ZMCRD5V1SB2	4.96	5.22					
ZMCRD5V1SB3	5.12	5.39	5	80	5	5	2.5
ZMCRD5V6SB	5.29	5.94					
ZMCRD5V6SB1	5.29	5.57					
ZMCRD5V6SB2	5.47	5.75	5	50	5	2	3
ZMCRD5V6SB3	5.65	5.94					
ZMCRD6V2SB	5.84	6.55					
ZMCRD6V2SB1	5.84	6.14					
ZMCRD6V2SB2	6.04	6.35					
ZMCRD6V2SB3	6.24	6.55	5	30	5	2	4
ZMCRD6V8SB	6.44	7.17					
ZMCRD6V8SB1	6.44	6.76					
ZMCRD6V8SB2	6.62	6.96	5	30	5	2	5
ZMCRD6V8SB3	6.83	7.17					
ZMCRD7V5SB	7.03	7.87					
ZMCRD7V5SB1	7.03	7.39					
ZMCRD7V5SB2	7.25	7.63					
ZMCRD7V5SB3	7.49	7.87	5	30	5	2	5
ZMCRD8V2SB	7.73	8.67					
ZMCRD8V2SB1	7.73	8.13					
ZMCRD8V2SB2	7.98	8.39	5	30	5	2	5
ZMCRD8V2SB3	8.25	8.67					



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ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001:2004  
Certificate No. 7116



ISO 9001:2000  
Certificate No. 0506098

Dated : 17/05/2006

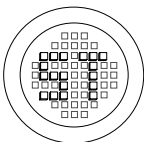
# ZMC RD...S Series

## Characteristics at $T_a = 25^\circ\text{C}$

Type	Zener Voltage			Dynamic Impedance		Reverse Current	
	$V_Z (V)^{1)}$			$Z_Z (\Omega)^{2)}$		$I_R (\mu A)$	
	Min.	Max.	$I_Z (mA)$	Max.	$I_Z (mA)$	Max.	$V_R (V)$
ZMCRD9V1SB	8.53	9.58	5	30	5	2	6
ZMCRD9V1SB1	8.53	8.96					
ZMCRD9V1SB2	8.81	9.26					
ZMCRD9V1SB3	9.12	9.58					
ZMCRD10SB	9.42	10.58	5	30	5	2	7
ZMCRD10SB1	9.42	9.9					
ZMCRD10SB2	9.74	10.24					
ZMCRD10SB3	10.08	10.58					
ZMCRD11SB	10.4	11.6	5	30	5	2	8
ZMCRD11SB1	10.4	10.92					
ZMCRD11SB2	10.72	11.26					
ZMCRD11SB3	11.06	11.6					
ZMCRD12SB	11.38	12.64	5	35	5	2	9
ZMCRD12SB1	11.38	11.94					
ZMCRD12SB2	11.69	12.28					
ZMCRD12SB3	12.04	12.64					
ZMCRD13SB	12.43	14	5	35	5	2	10
ZMCRD15SB	13.8	15.56	5	40	5	2	11
ZMCRD16SB	15.31	17.14	5	40	5	2	12
ZMCRD18SB	16.89	19.08	5	45	5	2	13
ZMCRD20SB	18.8	21.14	5	50	5	2	15
ZMCRD22SB	20.81	23.25	5	55	5	2	17
ZMCRD24SB	22.86	25.66	5	60	5	2	19
ZMCRD27SB	25.1	28.9	2	70	2	2	21
ZMCRD30SB	28	32	2	80	2	2	23
ZMCRD33SB	31	35	2	80	2	2	25
ZMCRD36SB	34	38	2	90	2	2	27
ZMCRD39SB	37	41	2	100	2	2	30
ZMCRD43SB	40	45	2	130	2	2	33
ZMCRD47SB	44	49	2	150	2	2	36
ZMCRD51SB	48	54	2	180	2	1	39
ZMCRD56SB	53	60	2	180	2	1	43
ZMCRD62SB	58	66	2	200	2	0.2	47
ZMCRD68SB	64	72	2	250	2	0.2	52
ZMCRD75SB	70	79	2	300	2	0.2	57
ZMCRD82SB	77	87	2	300	2	0.2	63
ZMCRD91SB	85	96	1	700	1	0.2	69
ZMCRD100SB	94	106	1	700	1	0.2	76
ZMCRD110SB	104	116	1	800	1	0.2	84
ZMCRD120SB	114	126	1	900	1	0.2	91

<sup>1)</sup>  $V_Z$  is tested with pulse (20 ms).

<sup>2)</sup>  $Z_Z$  is measured at  $I_Z$  by given a very small A.C. Current Signal.



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