



Micro Commercial Components

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**DLZ3.6A  
 THRU  
 DLZ39D**

**500 mW  
 Zener Diode  
 3.46 to 38.52 Volts**

**Features**

- Small Surface Mounting Type.(LLDS)
- High Reliability
- Silicon Epitaxial Planar
- Lead Free Finish/RoHS Compliant(Note 1) ("P" Suffix designates Compliant. See ordering information)

**Maximum Ratings**

Symbol	Rating	Rating	Unit
$P_b$	Power dissipation	500	mW
$T_j$	Junction Temperature	-55 to +175	$^{\circ}C$
$T_{STG}$	Storage Temperature Range	-55 to +175	$^{\circ}C$

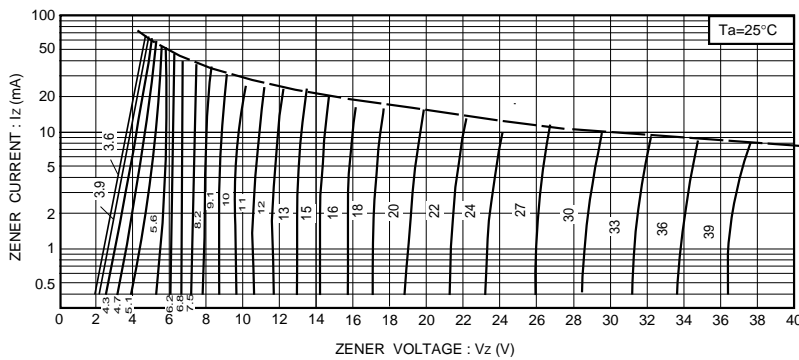


Fig.1 Zener characteristics

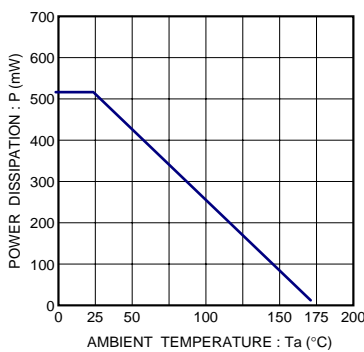


Fig.2 Derating curve

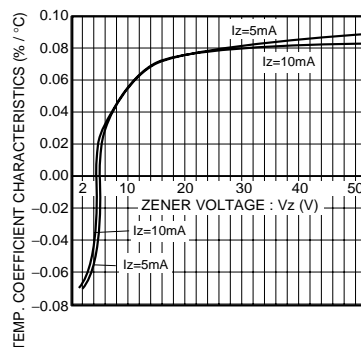
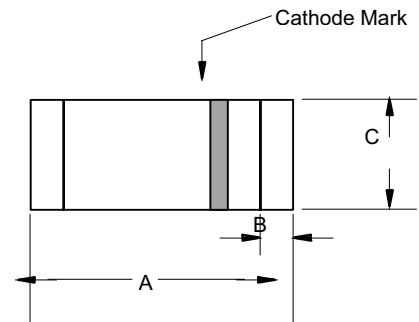


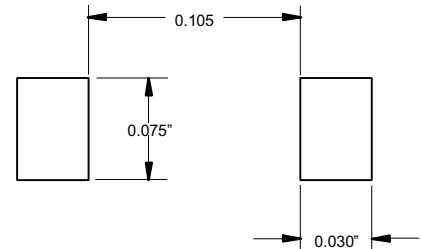
Fig.3 Zener voltage - temp. coefficient characteristics

**MINIMELF**



DIM	DIMENSION				NOTE
	INCHES		MM		
	MIN	MAX	MIN	MAX	
A	.130	.146	3.30	3.70	
B	.008	.016	0.20	0.40	
C	.055	.059	1.40	1.50	

**SUGGESTED SOLDER PAD LAYOUT**



Note:1. Lead in Glass Exemption Applied, see EU Directive Annex 5.

# DLZ3.6A~DLZ18C

## ELECTRICAL CHARACTERISTICS @25 °C

Type	ZENER VOLTAGE V <sub>Z</sub> VOLTS			Operating Resistance Z <sub>Z</sub> (OHMS)		Rising Operating Resistance Z <sub>ZK</sub> (OHMS)		REVERSE CURRENT I <sub>R</sub> (Max) @ V <sub>R</sub>	
	Min.	Max.	I <sub>Z</sub> (mA)	Max.	I <sub>Z</sub> (mA)	Max.	I <sub>Z</sub> (mA)	μA	VOLTS
DLZ3.6A	3.46	3.69	20	60	20	1000	1.0	10	1.0
DLZ3.6B	3.60	3.84	20	60	20	1000	1.0	10	1.0
DLZ3.9A	3.74	4.01	20	50	20	1000	1.0	5.0	1.0
DLZ3.9B	3.89	4.16	20	50	20	1000	1.0	5.0	1.0
DLZ4.3A	4.04	4.29	20	40	20	1000	1.0	5.0	1.0
DLZ4.3B	4.17	4.43	20	40	20	1000	1.0	5.0	1.0
DLZ4.3C	4.30	4.57	20	40	20	1000	1.0	5.0	1.0
DLZ4.7A	4.44	4.68	20	25	20	900	1.0	5.0	1.0
DLZ4.7B	4.55	4.80	20	25	20	900	1.0	5.0	1.0
DLZ4.7C	4.68	4.93	20	25	20	900	1.0	5.0	1.0
DLZ5.1A	4.81	5.07	20	20	20	800	1.0	5.0	1.5
DLZ5.1B	4.94	5.20	20	20	20	800	1.0	5.0	1.5
DLZ5.1C	5.09	5.37	20	20	20	800	1.0	5.0	1.5
DLZ5.6A	5.28	5.55	20	13	20	500	1.0	5.0	2.5
DLZ5.6B	5.45	5.73	20	13	20	500	1.0	5.0	2.5
DLZ5.6C	5.61	5.91	20	13	20	500	1.0	5.0	2.5
DLZ6.2A	5.78	6.09	20	10	20	300	1.0	5.0	3.0
DLZ6.2B	5.96	6.27	20	10	20	300	1.0	5.0	3.0
DLZ6.2C	6.12	6.44	20	10	20	300	1.0	5.0	3.0
DLZ6.8A	6.29	6.63	20	8.0	20	150	0.5	2.0	3.5
DLZ6.8B	6.49	6.83	20	8.0	20	150	0.5	2.0	3.5
DLZ6.8C	6.66	7.01	20	8.0	20	150	0.5	2.0	3.5
DLZ7.5A	6.85	7.22	20	8.0	20	120	0.5	0.5	4.0
DLZ7.5B	7.07	7.45	20	8.0	20	120	0.5	0.5	4.0
DLZ7.5C	7.29	7.67	20	8.0	20	120	0.5	0.5	4.0
DLZ8.2A	7.53	7.92	20	8.0	20	120	0.5	0.5	5.0
DLZ8.2B	7.78	8.19	20	8.0	20	120	0.5	0.5	5.0
DLZ8.2C	8.03	8.45	20	8.0	20	120	0.5	0.5	5.0
DLZ9.1A	8.29	8.73	20	8.0	20	120	0.5	0.5	6.0
DLZ9.1B	8.57	9.01	20	8.0	20	120	0.5	0.5	6.0
DLZ9.1C	8.83	9.30	20	8.0	20	120	0.5	0.5	6.0
DLZ10A	9.12	9.59	20	8.0	20	120	0.5	0.2	7.0
DLZ10B	9.41	9.90	20	8.0	20	120	0.5	0.2	7.0
DLZ10C	9.70	10.20	20	8.0	20	120	0.5	0.2	7.0
DLZ10D	9.94	10.44	20	8.0	20	120	0.5	0.2	7.0
DLZ11A	10.18	10.71	10	10	10	120	0.5	0.2	8.0
DLZ11B	10.50	11.05	10	10	10	120	0.5	0.2	8.0
DLZ11C	10.82	11.38	10	10	10	120	0.5	0.2	8.0
DLZ12A	11.13	11.71	10	12	10	110	0.5	0.2	9.0
DLZ12B	11.44	12.03	10	12	10	110	0.5	0.2	9.0
DLZ12C	11.74	12.35	10	12	10	110	0.5	0.2	9.0
DLZ13A	12.11	12.75	10	14	10	110	0.5	0.2	10
DLZ13B	12.55	13.21	10	14	10	110	0.5	0.2	10
DLZ13C	12.99	13.66	10	14	10	110	0.5	0.2	10
DLZ15A	13.44	14.13	10	16	10	110	0.5	0.2	11
DLZ15B	13.89	14.62	10	16	10	110	0.5	0.2	11
DLZ15C	14.35	15.09	10	16	10	110	0.5	0.2	11
DLZ16A	14.80	15.57	10	18	10	150	0.5	0.2	12
DLZ16B	15.25	16.04	10	18	10	150	0.5	0.2	12
DLZ16C	15.69	16.51	10	18	10	150	0.5	0.2	12
DLZ18A	16.22	17.06	10	23	10	150	0.5	0.2	13
DLZ18B	16.82	17.70	10	23	10	150	0.5	0.2	13
DLZ18C	17.42	18.33	10	23	10	150	0.5	0.2	13

# DLZ20A~DLZ39D

## ELECTRICAL CHARACTERISTICS @25 °C

Type	ZENER VOLTAGE V <sub>Z</sub> VOLTS			Operating Resistance Z <sub>Z</sub> (OHMS)		Rising Operating Resistance Z <sub>ZK</sub> (OHMS)		REVERSE CURRENT I <sub>R</sub> (Max) @ V <sub>R</sub>	
	Min.	Max.	I <sub>Z</sub> (mA)	Max.	I <sub>Z</sub> (mA)	Max.	I <sub>Z</sub> (mA)	μA	VOLTS
DLZ20A	18.20	18.96	10	28	10	200	0.5	0.2	15
DLZ20B	18.63	19.59	10	28	10	200	0.5	0.2	15
DLZ20C	19.23	20.22	10	28	10	200	0.5	0.2	15
DLZ20D	19.72	20.72	10	28	10	200	0.5	0.2	15
DLZ22A	20.15	21.20	5.0	30	5.0	200	0.5	0.2	17
DLZ22B	20.64	21.71	5.0	30	5.0	200	0.5	0.2	17
DLZ22C	21.08	22.17	5.0	30	5.0	200	0.5	0.2	17
DLZ22D	21.52	22.63	5.0	30	5.0	200	0.5	0.2	17
DLZ24A	22.05	23.18	5.0	35	5.0	200	0.5	0.2	19
DLZ24B	22.61	23.77	5.0	35	5.0	200	0.5	0.2	19
DLZ24C	23.12	24.13	5.0	35	5.0	200	0.5	0.2	19
DLZ24D	23.63	24.85	5.0	35	5.0	200	0.5	0.2	19
DLZ27A	24.26	25.52	5.0	45	5.0	250	0.5	0.2	21
DLZ27B	24.97	26.26	5.0	45	5.0	250	0.5	0.2	21
DLZ27C	25.63	26.95	5.0	45	5.0	250	0.5	0.2	21
DLZ27D	26.29	27.64	5.0	45	5.0	250	0.5	0.2	21
DLZ30A	26.99	28.39	5.0	55	5.0	250	0.5	0.2	23
DLZ30B	27.70	29.13	5.0	55	5.0	250	0.5	0.2	23
DLZ30C	28.36	29.82	5.0	55	5.0	250	0.5	0.2	23
DLZ30D	29.02	30.51	5.0	55	5.0	250	0.5	0.2	23
DLZ33A	29.68	31.22	5.0	65	5.0	250	0.5	0.2	25
DLZ33B	30.32	31.88	5.0	65	5.0	250	0.5	0.2	25
DLZ33C	30.90	32.50	5.0	65	5.0	250	0.5	0.2	25
DLZ33D	31.49	33.11	5.0	65	5.0	250	0.5	0.2	25
DLZ36A	32.14	33.79	5.0	75	5.0	250	0.5	0.2	27
DLZ36B	32.79	34.49	5.0	75	5.0	250	0.5	0.2	27
DLZ36C	33.40	35.13	5.0	75	5.0	250	0.5	0.2	27
DLZ36D	34.01	35.77	5.0	75	5.0	250	0.5	0.2	27
DLZ39A	34.68	36.47	5.0	85	5.0	250	0.5	0.2	30
DLZ39B	35.36	37.19	5.0	85	5.0	250	0.5	0.2	30
DLZ39C	36.00	37.85	5.0	85	5.0	250	0.5	0.2	30
DLZ39D	36.63	38.52	5.0	85	5.0	250	0.5	0.2	30



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## Ordering Information

Device	Packing
(Part Number)-TP	Tape&Reel;2.5Kpcs/Reel

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