



DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

**DZL4728A
THRU
DZL1330A**

TECHNICAL SPECIFICATIONS OF SURFACE MOUNT ZENER DIODES

VOLTAGE RANGE - 3.3 to 330 Volts

CURRENT - 1.0 Watt

FEATURES

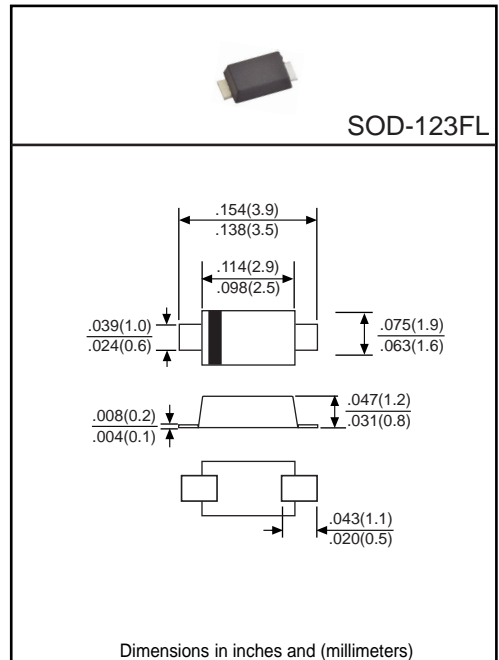
- * Voltage Range: 3.3V to 330V
- * Low leakage
- * Low inductance
- * High peak reverse power dissipation
- * Glass passivated junction
- * Build-in strain relief

MECHANICAL DATA

- * Case: Molded Plastic
- * Terminals: Solder plated, solderable per MIL-STD-705, Method 2026
- * Polarity: As marked
- * Mounting position: Any
- * Weight: 0.017 gram Approx.

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

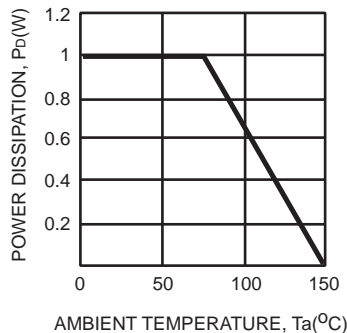
Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60 Hz, resistive or inductive load.
For capacitive load, derate current by 20%.



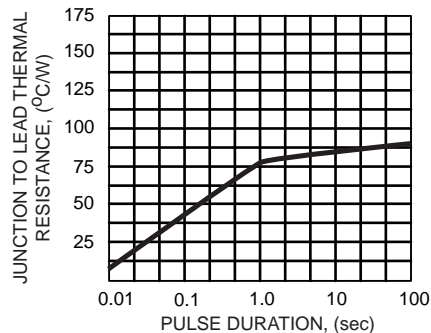
	SYMBOL	VALUE	UNITS
Maximum Power Dissipation @TL=75°C (Note 1)	P _{tot}	1.0	W
Maximum forward voltage at I _F =200mA	V _F	1.2	Volts
Maximum Thermal Resistance Junction to Ambient Air	R _{θJA}	55	°C/W
Junction Temperature Range	T _J	-55 to +150	°C
Storage Temperature Range	T _{STG}	-55 to +150	°C

NOTES : 1. Mounted with 1.0" x 1.0" (2.54 x 2.54 cm) copper areas pads.

**Fig. 1
POWER TEMPERATURE
DERATING CURVE**



**Fig. 2
TYPICAL THERMAL RESISTANCE
VERSUS LEAD LENGTH**



RATING AND CHARACTERISTIC CURVES (DZL4728A THRU DZL1330A)

TYPE	Nominal Zener Voltage $V_Z @ I_{ZT}$	Zener Test Current I_{ZT} mA	Maximum Zener Impedance		I_{ZK} mA	Maximum Reverse Leakage Current		Maximum Regulator Current I_{ZM} mA	Surge Current @TA=25°C I_R mA
			$Z_{ZT} @ I_{ZT}$ Ohms	$Z_{ZK} @ I_{ZK}$ Ohms		I_R uA	@ V_R Volts		
DZL4728A	3.3	76.0	10.0	400	1.00	100.0	1.0	285.0	1370
DZL4729A	3.6	69.0	10.0	400	1.00	100.0	1.0	263.0	1255
DZL4730A	3.9	64.0	9.0	400	1.00	50.0	1.0	243.0	1160
DZL4731A	4.3	58.0	9.0	400	1.00	10.0	1.0	219.0	1050
DZL4732A	4.7	53.0	8.0	500	1.00	10.0	1.0	203.0	960
DZL4733A	5.1	49.0	7.0	550	1.00	10.0	1.0	186.0	885
DZL4734A	5.6	45.0	5.0	600	1.00	10.0	2.0	170.0	805
DZL4735A	6.2	41.0	2.0	700	1.00	10.0	3.0	146.0	730
DZL4736A	6.8	37.0	3.5	700	1.00	5.0	4.0	133.0	660
DZL4737A	7.5	34.0	4.0	700	0.50	5.0	5.0	121.0	605
DZL4738A	8.2	31.0	4.5	700	0.50	5.0	6.0	110.0	550
DZL4739A	9.1	28.0	5.0	700	0.50	0.5	7.0	100.0	500
DZL4740A	10.0	25.0	7.0	700	0.25	0.5	7.6	91.0	454
DZL4741A	11.0	23.0	8.0	700	0.25	0.1	8.4	83.0	414
DZL4742A	12.0	21.0	9.0	700	0.25	0.1	9.1	76.0	380
DZL4743A	13.0	19.0	10	700	0.25	0.1	9.9	69.0	344
DZL4744A	15.0	17.0	14	700	0.25	0.1	11.4	61.0	305
DZL4745A	16.0	15.5	16	700	0.25	0.1	12.2	57.0	285
DZL4746A	18.0	14.0	20	750	0.25	0.1	13.7	50.0	250
DZL4747A	20.0	12.5	22	750	0.25	0.1	15.2	45.0	225
DZL4748A	22.0	11.5	23	750	0.25	0.1	16.7	41.0	205
DZL4749A	24.0	10.5	25	750	0.25	0.1	18.2	38.0	190
DZL4750A	27.0	9.5	35	750	0.25	0.1	20.6	34.0	170
DZL4751A	30.0	8.5	40	1000	0.25	0.1	22.8	30.0	150
DZL4752A	33.0	7.5	45	1000	0.25	0.1	25.1	27.0	135
DZL4753A	36.0	7.0	50	1000	0.25	0.1	27.4	25.0	125
DZL4754A	39.0	6.5	60	1000	0.25	0.1	29.7	23.0	115
DZL4755A	43.0	6.0	70	1500	0.25	0.1	32.7	22.0	110
DZL4756A	47.0	5.5	80	1500	0.25	0.1	35.8	19.0	95
DZL4757A	51.0	5.0	95	1500	0.25	0.1	38.8	18.0	90
DZL4758A	56.0	4.5	110	2000	0.25	0.1	42.6	16.0	80
DZL4759A	62.0	4.0	125	2000	0.25	0.1	47.1	14.0	70
DZL4760A	68.0	3.7	150	2000	0.25	0.1	51.7	13.0	65
DZL4761A	75.0	3.3	175	2000	0.25	0.1	56.0	12.0	60
DZL4762A	82.0	3.0	200	3000	0.25	0.1	62.2	11.0	55
DZL4763A	91.0	2.8	250	3000	0.25	0.1	69.2	10.0	50
DZL4764A	100.0	2.5	350	3000	0.25	0.1	76.0	9.0	45
DZL1110A	110.0	2.3	450	4000	0.25	0.1	83.6	8.6	40
DZL1120A	120.0	2.0	550	4500	0.25	0.1	91.2	7.8	37
DZL1130A	130.0	1.9	700	5000	0.25	0.1	98.8	7.0	34
DZL1150A	150.0	1.7	1000	6000	0.25	0.1	114.0	6.4	30
DZL1160A	160.0	1.6	1100	6500	0.25	0.1	121.6	5.8	28
DZL1180A	180.0	1.4	1200	7000	0.25	0.1	136.8	5.2	25
DZL1200A	200.0	1.2	1900	9990	0.25	0.1	152.0	4.7	22
DZL1220A	220.0	1.0	1600	8000	0.25	0.1	167.2	4.0	20
DZL1240A	240.0	0.9	1800	8500	0.25	0.1	182.4	3.8	19
DZL1250A	250.0	0.9	2000	9000	0.25	0.1	190.0	3.6	18
DZL1270A	270.0	0.8	2100	9000	0.25	0.1	205.0	3.3	16
DZL1300A	300.0	0.8	2300	9500	0.25	0.1	228.0	3.0	15
DZL1330A	330.0	0.7	2300	9500	0.25	0.1	250.2	2.7	13

NOTE: Suffix "A" indicates $\pm 5\%$ Tolerance.

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