DC COMPONENTS CO., LTD.

RECTIFIER SPECIALISTS

DZL4728A THRU DZL4771A

TECHNICAL SPECIFICATIONS OF SILICON PLANAR POWER ZENER DIODES

VOLTAGE RANGE - 3.3 to 200 Volts *POWER - 1.0 Watt*

FEATURES

* Voltage range : 3.3V to 200V
* Low zener impedance
* Low regulation factor
* High reliability
* Glass passivated junction

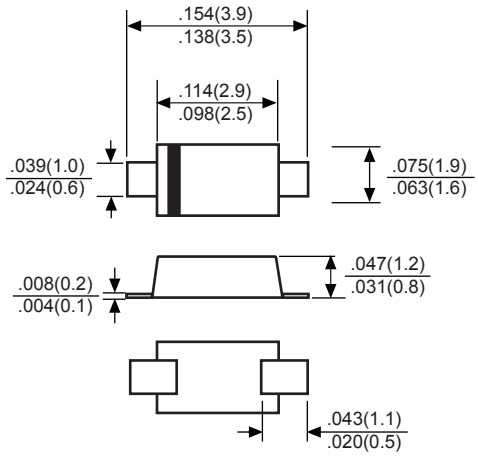
MECHANICAL DATA

* Case: Molded plastic
* Epoxy: UL-94-0 rate flame retardant
* Terminals: Solder plated solderable per MIL-STD-750, Method 2026
* Polarity: As marked
* Mounting position: Any
* Weight: 0.017 gram

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

SOD-123FL



Dimensions in inches and (millimeters)

	SYMBOL	VALUE	UNITS
Maximum Power Dissipation at T_L = 75°C (Note 1)	P_{tot}	1.0	W
Maximum Instantaneous Forward Voltage at IF = 200 mA	V_F	1.2	Volts
Typical Thermal Resistance Junction to Ambient Air	$R_{\theta JA}$	55	°C/W
Junction Temperature Range	T_J	150	°C
Storage Temperature Range	T_{STG}	-55 to +150	°C

Note 1 : Suffix "A" indicates Zener Voltage Tolerance ± 5%

FIG. 1
TYPICAL FORWARD CURRENT
DERATING CURVE

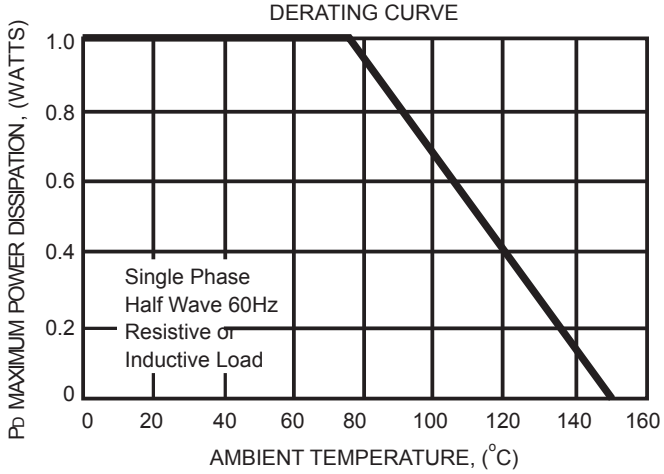
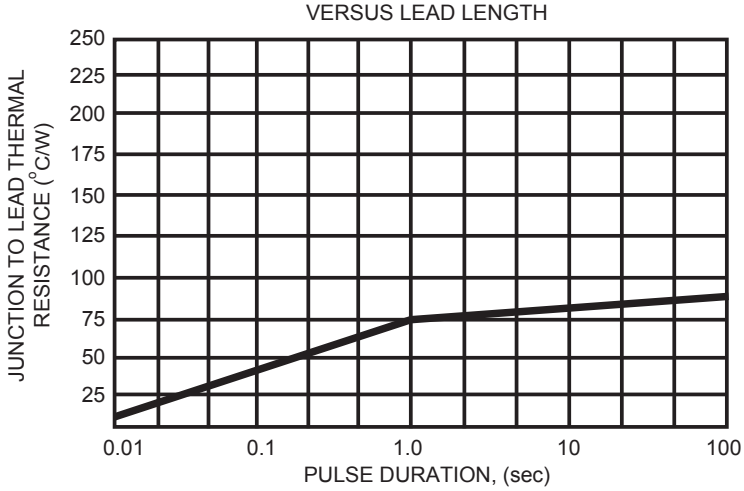


FIG. 2
TYPICAL THERMAL RESISTANCE
VERSUS LEAD LENGTH



RATING AND CHARACTERISTIC CURVES (DZL4728A THRU DZL4771A)

TYPE	Nominal Zener Voltage	Zener Test Current	Maximum Zener Impedance		IZK	Maximum Reverse Leakage Current	
	V_Z@I_{ZT}	I_{ZT}	Z_{ZT}@I_{ZT}	Z_{ZK}@I_{ZK}		I_R	@V_R
	Volts	mA	Ohms	Ohms	mA	μA	Volts
DZL4728A	3.3	76	10	400	1.0	100	1.0
DZL4729A	3.6	69	10	400	1.0	100	1.0
DZL4730A	3.9	64	9.0	400	1.0	50	1.0
DZL4731A	4.3	58	9.0	400	1.0	10	1.0
DZL4732A	4.7	53	8.0	500	1.0	10	1.0
DZL4733A	5.1	49	7.0	550	1.0	10	1.0
DZL4734A	5.6	45	5.0	600	1.0	10	2.0
DZL4735A	6.2	41	2.0	700	1.0	10	3.0
DZL4736A	6.8	37	3.5	700	1.0	10	4.0
DZL4737A	7.5	34	4.0	700	0.5	10	5.0
DZL4738A	8.2	31	4.5	700	0.5	10	6.0
DZL4739A	9.1	28	5.0	700	0.5	10	7.0
DZL4740A	10.0	25	7.0	700	0.25	10	7.6
DZL4741A	11.0	23	8.0	700	0.25	5.0	8.4
DZL4742A	12.0	21	9.0	700	0.25	5.0	9.1
DZL4743A	13.0	19	10	700	0.25	5.0	9.9
DZL4744A	15.0	17	14	700	0.25	5.0	11.4
DZL4745A	16.0	15.5	16	700	0.25	5.0	12.2
DZL4746A	18.0	14	20	750	0.25	5.0	13.7
DZL4747A	20.0	12.5	22	750	0.25	5.0	15.2
DZL4748A	22.0	11.5	23	750	0.25	5.0	16.7
DZL4749A	24.0	10.5	25	750	0.25	5.0	18.2
DZL4750A	27.0	9.5	35	750	0.25	5.0	20.6
DZL4751A	30.0	8.5	40	1000	0.25	5.0	22.8
DZL4752A	33.0	7.5	45	1000	0.25	5.0	25.1
DZL4753A	36.0	7.0	50	1000	0.25	5.0	27.4
DZL4754A	39.0	6.5	60	1000	0.25	5.0	29.7
DZL4755A	43.0	6.0	70	1500	0.25	5.0	32.7
DZL4756A	47.0	5.5	80	1500	0.25	5.0	35.8
DZL4757A	51.0	5.0	95	1500	0.25	5.0	38.8
DZL4758A	56.0	4.5	110	2000	0.25	5.0	42.6

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TYPE	Nominal Zener Voltage	Zener Test Current	Maximum Zener Impedance		IZK	Maximum Reverse Leakage Current	
	V_Z@I_{ZT}	I_{ZT}	Z_{ZT}@I_{ZT}	Z_{ZK}@I_{ZK}		I_R	@V_R
	Volts	mA	Ohms	Ohms	mA	μA	Volts
DZL4759A	62.0	4.0	125	2000	0.25	5.0	47.1
DZL4760A	68.0	3.7	150	2000	0.25	5.0	51.7
DZL4761A	75.0	3.3	175	2000	0.25	5.0	56.0
DZL4762A	82.0	3.0	200	3000	0.25	5.0	62.2
DZL4763A	91.0	2.8	250	3000	0.25	5.0	69.2
DZL4764A	100	2.5	350	3000	0.25	5.0	76.0
DZL4765A	110	2.3	450	4000	0.25	5.0	83.6
DZL4766A	120	2.0	550	4500	0.25	5.0	91.2
DZL4767A	130	1.9	700	5000	0.25	5.0	98.8
DZL4768A	150	1.7	1000	6000	0.25	5.0	114.0
DZL4769A	160	1.6	1100	6500	0.25	5.0	121.6
DZL4770A	180	1.4	1200	7000	0.25	5.0	136.8
DZL4771A	200	1.2	1900	9990	0.25	5.0	152.0

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