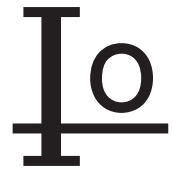


PL series

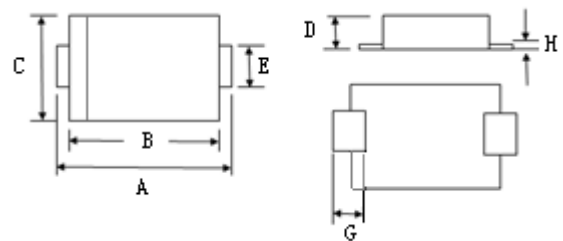
Zener Diodes 1W



SOD-123

MECHANICAL DATA:

- ◆ Case: Molded plastic
- ◆ Epoxy: UL94V-0 rate flame retardant
- ◆ Polarity: Color band denotes cathode end
- ◆ Mounting position: Any
- ◆ Lead Free Finish/RoHS Compliant



Dim	Millimeters		Inches	
	Min	Max	Min	Max
A	3.3	3.85	0.13	0.15
B	2.3	2.85	0.09	0.112
C	1.4	1.9	0.055	0.075
D	0	1.35	0.035	0.053
E	0.5	1.2	0.02	0.047
G	0.55		0.02	
H	0.2		0.008	

Maximum Ratings And Thermal Characteristics

Rating at 25°C ambient temperature unless otherwise specified

Parameter	Symbol	Value	Units
Power Dissipation	P_D	1	W
Thermal Resistance Junction To Ambient Air	$R_{\theta JA}$	100	°C/W
Thermal Resistance Junction To Leads	$R_{\theta JL}$	25	°C/W
Storage Temperature Range	T_{STG}	-55 to 150	°C
Operating Junction Temperature Range	T_J	-55 to 150	°C

Parameter	Test Conditions	Symbol	Value	Unit
Forward voltage	IF=200mA	VF	1.2	V

Electrical Characteristics (Ratings at 25°C ambient temperature unless otherwise specified).

Part Number	Device Marking Dode	Nominal Zener voltage		Maximum Zener impedance	Temperature Coefficient A VZ@IZ		Maximum reverse Leakage Current		Maximum DC Zener Current
		VZ @IZT		ZZT@IZT	% / °C		IR@VR		IZM
		V	mA	Ω	Min	MAX	μA	V	mA
PL5V1C	W9	5.1	100	6	-0.08	0.02	10	1	178
PL5V6C	WA	5.6	100	4	-0.04	0.04	10	2	162
PL6V2C	WB	6.2	100	3	-0.01	0.06	5	2	146
PL6V8C	WC	6.8	100	3	0	0.07	10	3	133
PL7V5C	WD	7.5	100	2	0	0.07	5	3	121
PL8V2C	WE	8.2	100	2	0.03	0.08	5	3	110
PL9V1C	WF	9.1	50	4	0.03	0.08	5	3	100
PL10C	WG	10	50	4	0.05	0.09	7	7.5	91
PL11C	WH	11	50	7	0.05	0.1	4	8.2	83
PL12C	WI	12	50	7	0.05	0.1	3	9	76
PL13C	WK	13	50	10	0.05	0.1	2	10	69
PL15C	WL	15	50	10	0.05	0.1	1	11	61
PL16C	WM	16	25	15	0.06	0.11	1	12	57
PL18C	WN	18	25	15	0.06	0.11	1	13	50
PL20C	WO	20	25	15	0.06	0.11	1	15	45
PL22C	WP	22	25	15	0.06	0.11	1	16	41
PL24C	WR	24	25	15	0.06	0.11	1	18	38
PL27C	WS	27	25	15	0.06	0.11	1	20	34
PL30C	WT	30	25	15	0.06	0.11	1	22	30
PL33C	WU	33	25	15	0.06	0.11	1	24	27
PL36C	WW	36	10	40	0.06	0.11	1	27	25
PL39C	WX	39	10	40	0.06	0.11	1	30	23
PL43C	WY	43	10	45	0.07	0.12	1	33	22
PL47C	WZ	47	10	45	0.07	0.12	1	36	19
PL51C	X1	51	10	60	0.07	0.12	1	39	18
PL56C	X2	56	10	60	0.07	0.12	1	43	16
PL62C	X3	62	10	80	0.08	0.13	1	47	14
PL68C	X4	68	10	80	0.08	0.13	1	51	13
PL75C	X5	75	10	100	0.08	0.13	1	56	12
PL82C	X6	82	10	100	0.08	0.13	1	62	11
PL91C	X7	91	5	200	0.09	0.13	1	68	10

2. Typical Characteristics

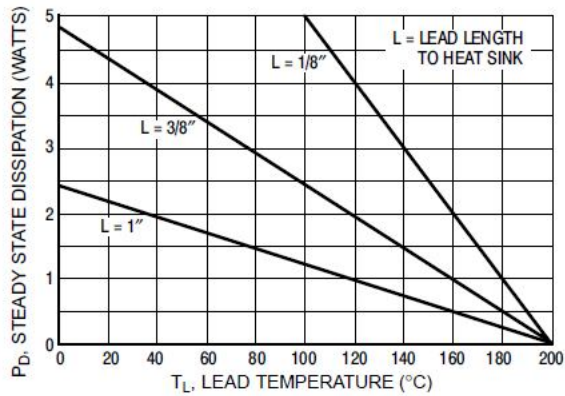


Figure 1. Power Temperature Derating Curve

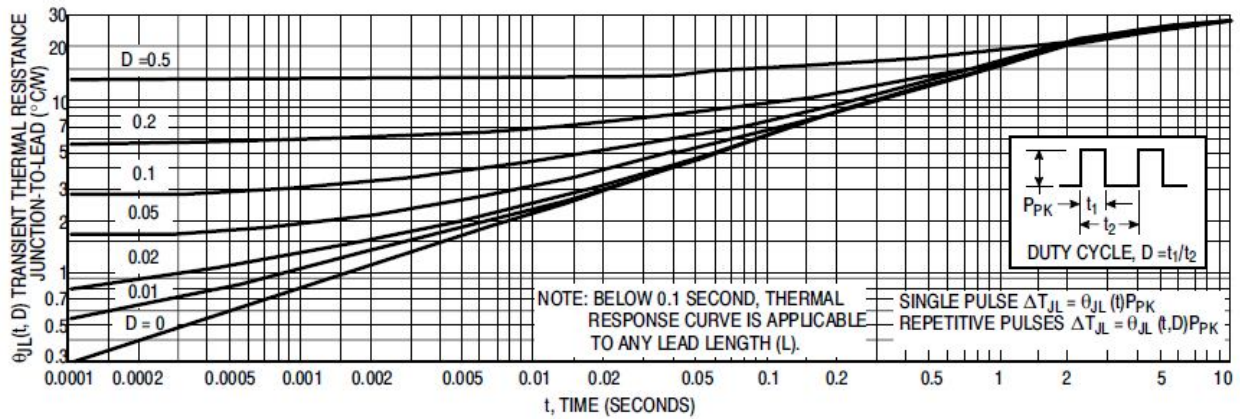


Figure 2. Typical Thermal Response L, Lead Length = 3/8 Inch

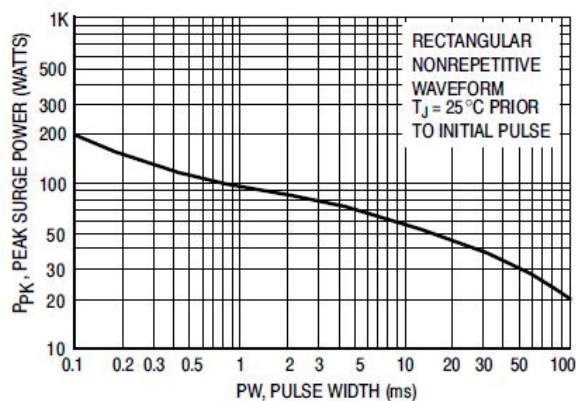


Figure 3. Maximum Surge Power

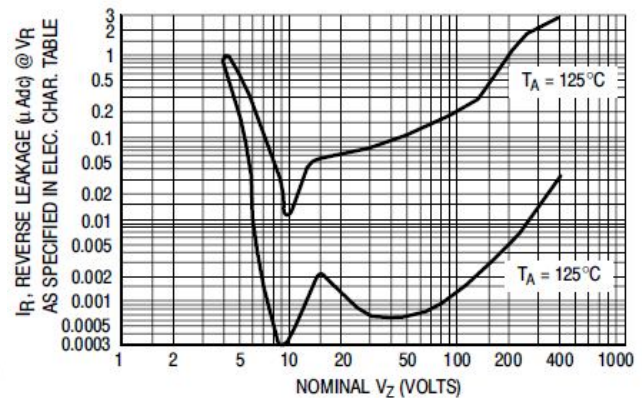


Figure 4. Typical Reverse Leakage