

January 16, 1998

TEL:805-498-2111 FAX:805-498-3804 WEB:http://www.semtech.com

**AXIAL LEADED, HERMETICALLY SEALED,
10 WATT VOLTAGE REGULATORS****QUICK REFERENCE
DATA**

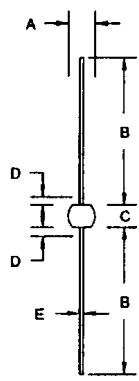
- Low dynamic impedance
- Hermetically sealed in Metoxilite fused metal oxide
- 10 Watt applications
- Low reverse leakage currents
- Small package

- $V_Z \text{ nom} = 6.8 - 120V$
- $I_Z = 0.11 - 2.1A$
- $Z_Z = 0.4 - 35\Omega$
- $I_R = 10 - 600\mu A$

ELECTRICAL SPECIFICATIONS (@ 25°C UNLESS OTHERWISE SPECIFIED)

Device Type	Breakdown Voltage $V_{BR} @ I_Z \text{ TEST}$			Zener Test Current $I_Z \text{ TEST}$	Zener Imped. Z_Z	Reverse Current $@ V_R \text{ TEST}$		Temp. Coeff. of $V_{(BR)}$ α_{VZ}	Maximum Reverse Current I_R
	nom	min	max			I_R	$V_R \text{ TEST}$		
	Volts	Volts	Volts	mA	Ohms	μA	Volts	%/°C	A
SY6.8	6.8	6.46	7.14	500	0.4	600	5.2	.05	2.1
SY7.5	7.5	7.13	7.87	500	0.4	400	5.7	.06	1.8
SY8.2	8.2	7.79	8.61	450	0.4	200	6.2	.06	1.7
SY9.1	9.1	8.65	9.55	450	0.5	100	6.9	.06	1.5
SY10	10	9.50	10.50	375	0.7	100	7.6	.07	1.4
SY11	11	10.45	11.55	375	0.7	50	8.4	.07	1.2
SY12	12	11.40	12.60	300	0.7	50	9.1	.07	1.1
SY13	13	12.35	13.65	300	1.0	50	9.9	.08	1.0
SY15	15	14.25	15.75	225	1.0	25	11.4	.08	0.90
SY16	16	15.20	16.80	225	1.5	25	12.2	.08	0.80
SY18	18	17.10	18.90	195	1.5	25	13.7	.085	0.70
SY20	20	19.0	21.0	195	1.6	10	15.2	.085	0.69
SY22	22	20.9	23.1	150	1.7	10	16.7	.085	0.63
SY24	24	22.8	25.2	150	1.7	10	18.2	.09	0.59
SY27	27	25.7	28.3	150	1.8	10	20.6	.09	0.52
SY30	30	28.5	31.5	120	1.9	10	22.8	.09	0.47
SY33	33	31.4	34.6	120	2.0	10	25.1	.095	0.43
SY36	36	34.2	37.8	90	2.5	10	27.4	.095	0.39
SY39	39	37.1	40.9	90	2.5	10	29.7	.095	0.36
SY43	43	40.9	45.1	90	3.0	10	32.7	.095	0.33
SY47	47	44.7	49.3	75	3.5	10	35.8	.095	0.30
SY51	51	48.5	53.5	75	4.0	10	38.8	.095	0.27
SY56	56	53.2	58.8	60	4.5	10	42.6	.095	0.25
SY62	62	58.9	65.1	60	5.0	10	47.1	.100	0.22
SY68	68	64.6	71.4	60	7.0	10	51.7	.100	0.21
SY75	75	71.3	78.7	60	10	10	56.0	.100	0.18
SY82	82	77.9	86.1	45	15	10	62.2	.100	0.17
SY91	91	86.5	95.5	45	17	10	69.2	.100	0.15
SY100	100	95.0	105.0	36	20	10	76.0	.100	0.14
SY110	110	104.5	115.0	36	22	10	83.6	.100	0.12
SY120	120	114.0	126.0	30	35	10	91.2	.100	0.11

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DIM #	MM		INCHES		NOTE
	MIN	MAX	MIN	MAX	
A	3.4	4.7	.135	.185	-
B	22.9	33.0	.90	1.30	-
C	3.5	5.0	.140	.195	-
D	-	.80	-	.030	1
E	.91	1.07	.036	.042	-

NOTES:
1. LEAD DIAMETER UNCONTROLLED OVER THIS REGION.

OPERATING TEMP -195°C to +175°C
STORAGE TEMP -195°C to +175°C

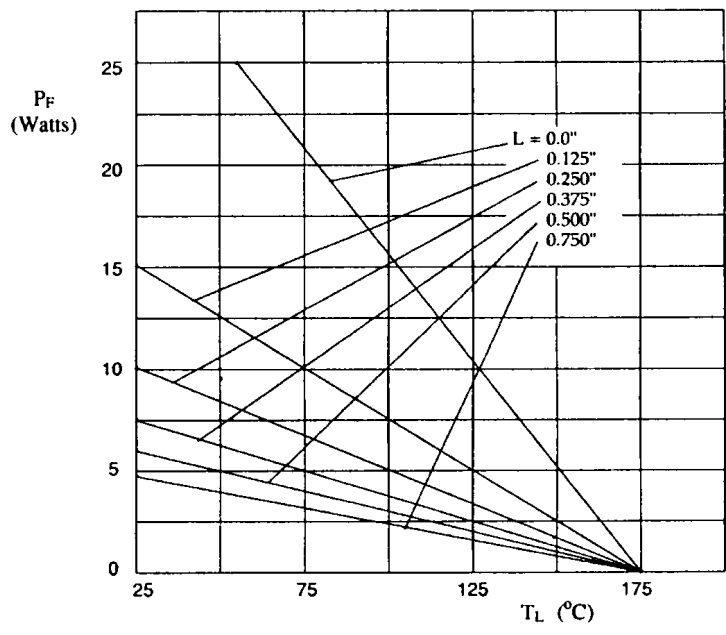


Figure 1. Maximum power versus lead temperature.

DataSheet4U.com

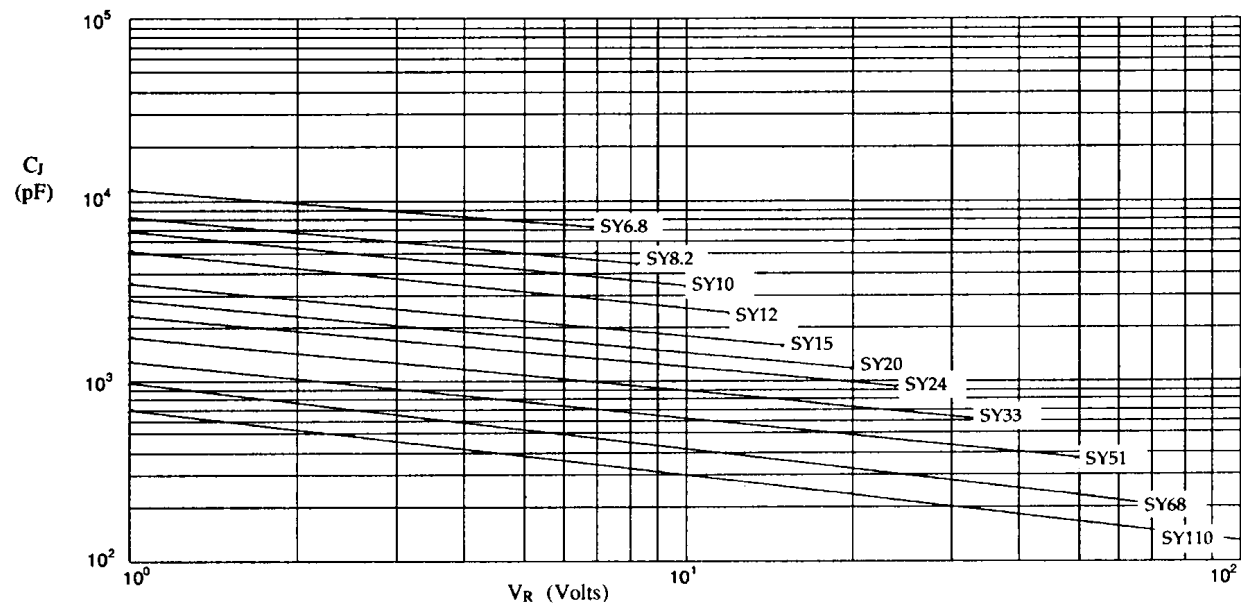


Fig 2. Typical junction capacitance versus reverse voltage.