

POWER DISCRETES
Description

Quick reference data

$$V_R = 200 - 1000 \text{ V}$$

$$I_o = 1.0\text{A}$$

$$t_{rr} = 150 \text{ to } 500\text{nS}$$

$$V_F = 1.2\text{V}$$

Features

- ◆ Low reverse leakage current
- ◆ Hermetically sealed in Metoxilite fused metal oxide
- ◆ Low forward voltage drop

These products are qualified to MIL-PRF-19500/359

Electrical Specifications

Electrical specifications @ $T_A = 25^\circ\text{C}$ unless otherwise specified.

Types	V_{RWM}	I_F (AV) @ 55°C		I_{FSM}	I_{FRM} @ $t_p=8.3\text{ms}$	T_{RR}	V_F @ I_F		I_R @ V_{RWM}		C_J @ 5V 1MHz	T_{STG}	$R\theta_{jL}$	
		-pcb mid	L = 3/8"						25°C	100°C			3/8"	0"
	V(pk)	A	A	A	A	ns	V	A	μA	μA	pF	°C	C/W°C	C/W°C
1N4942	200	1.0	2.0	25	6.0	150	1.2	1.0	0.5	25	27	-65 to +175	3	7
1N4944	400	1.0	2.0	25	6.0	150	1.2	1.0	0.5	25	27	-65 to +175	3	7
1N4946	600	1.0	2.0	25	6.0	250	1.2	1.0	0.5	25	27	-65 to +175	3	7
1N4947	800	1.0	2.0	25	6.0	250	1.2	1.0	0.5	25	18	-65 to +175	3	7
1N4948	1000	1.0	2.0	25	6.0	500	1.2	1.0	0.5	25	18	-65 to +175	3	7

POWER DISCRETES

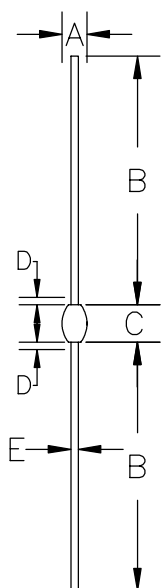
Ordering Information

Part Number	Description
1N4942 1N4944 1N4946 1N4947 1N4948	Axial leaded hermetically sealed ⁽¹⁾

Note:

(1) Available in bulk or tape and reel packaging. Please consult factory for quantities.

Outline Drawing



G2

DIM ^N	DIMENSIONS				
	MM		INCHES		NOTE
	MIN	MAX	MIN	MAX	
A	1.6	2.8	.065	.110	—
B	25.4	33.0	1.00	1.30	—
C	3.5	4.2	.140	.165	—
D	—	.80	—	.030	1
E	.66	.84	.026	.033	—

NOTE:

1. LEAD DIAMETER UNCONTROLLED
OVER THIS REGION.

Contact Information

Semtech Corporation
Power Discretes Products Division
200 Flynn Road, Camarillo, CA 93012
Phone: (805)498-2111 FAX (805)498-3804

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Semtech:](#)

[1N4947](#) [1N4942](#) [1N4946](#) [1N4948](#) [1N4944](#)