

**POWER DISCRETES**
**Description**

Quick reference data

$$V_R = 200V - 1000V$$

$$I_F = 1.0A$$

$$t_{rr} = 2\mu S$$

$$V_F = 1.2V$$

**Features**

- ◆ 1 Amp 55°C/no heat sink
- ◆ Monolithic non-cavity construction
- ◆ Fused metal oxide hermetic seal
- ◆ Superior thermal shock resistance
- ◆ Low thermal impedance
- ◆ Low reverse leakage
- ◆ PIV to 1000 volts

These products can be supplied as JAN, JANTX or JANTXV per MIL-S-19500/286

**Electrical Specifications**

Electrical specifications: All temperatures are local ambient , 25°C unless otherwise specified.

Device Types	Reverse Voltage		Forward Current (1)	Reverse Current (Max)		Instantaneous Forward Voltage	Repetitive Surge Current	1 Cycle Surge Current tp = 8.3ms	Reverse Recovery Time (2)		Typical Thermal Impedance (3)	
	V <sub>RWM</sub>	V <sub>RRM</sub>		Free Air 55°C	I <sub>R</sub>				V <sub>F</sub> @ I <sub>F</sub> = 1.0A <sub>dc</sub>	I <sub>FRM</sub>	I <sub>FSM</sub>	T <sub>rr</sub>
	V	V	A		25°C	100°C	V <sub>dc</sub>	A (pk)				A (pk)
				U <sub>A<sub>dc</sub></sub>					μS		°C/Watt	
1N4245	200	200	1.0	1.0	25	1.2	10	30	2	1	7	38
1N4246	400	400	1.0	1.0	25	1.2	10	30	2	1	7	38
1N4247	600	600	1.0	1.0	25	1.2	10	30	2	1	7	38
1N4248	800	800	1.0	1.0	25	1.2	10	30	2	1	7	38
1N4249	1000	1000	1.0	1.0	25	1.2	10	30	2	1	7	38

Notes:

- (1) The 1.0 amp rating @ 55°C requires no heat sinking, special mounting, or forced air across the body of the device.
- (2) Recovery conditions: 0.5 Amp forward current to -1.0 Amp reverse current. Recovery time measured when rectifier recovers to -.25 Amp.

Storage temperature: -65°C to +175°C.

## POWER DISCRETES

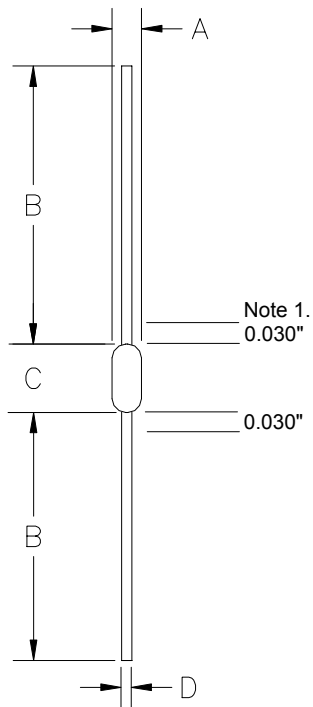
### Ordering Information

Part Number	Description
1N4245	Axial leaded hermetically sealed <sup>(1)</sup>
1N4246	
1N4247	
1N4248	
1N4249	

Note:

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

### Outline Drawing



DIM <sup>N</sup>	Dimensions				Note
	Inches		Millimeters		
	MIN	MAX	MIN	MAX	
A	.065	.110	1.65	2.79	-
B	1.00	1.25	25.4	31.7	-
C	.140	.165	3.56	4.19	-
D	.027	.031	.686	.786	-

Note:

1. Lead diameter not controlled in this area.

### Contact Information

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