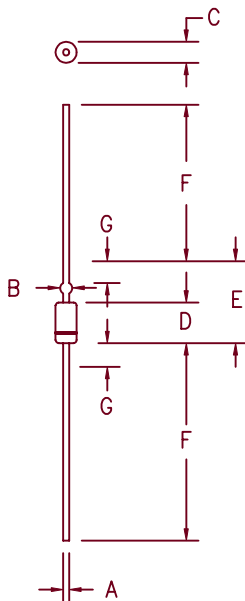


# 2 Amp Schottky MSL245



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	.025	.035	.64	.89	
B	.045	.100	1.14	2.54	3
C	.215	.235	5.46	5.97	1
D	.293	.357	7.44	9.07	
E	---	.570	---	14.48	
F	1.000	1.625	25.40	41.28	
G	---	.188	---	4.78	2

DO-13

Notes:

1. The major diameter is essentially constant along its length
2. Within this zone diameter may vary to allow for lead finishes and irregularities
3. Dimensions to allow for pinch or seal deformation anywhere along tubulation

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage
MSL245	45V	45V

- Schottky Barrier Rectifier
- Guard ring protection
- Low forward voltage
- 125°C junction temperature
- Reverse energy tested
- Hermetic package

### Electrical Characteristics

Average forward current	IF(AV) 2.0 Amps	TC = 85°C, square wave, RθJC = 30°C/W, L = 0"
Average forward current	IF(AV) 2.0 Amps	TL = 50°C, square wave, RθJL = 60°C/W, L = 3/8"
Maximum surge current	IFSM 125 Amps	8.3ms, half sine, TJ = 125°C
Max peak forward voltage	VFM .40 Volts	IFM = 2.0A; TJ = 125°C*
Max peak forward voltage	VFM .45 Volts	IFM = 2.0A; TJ = 25°C*
Max peak reverse current	IRM 50 mA	VRRM, TJ = 125°C*
Max peak reverse current	IRM 1.5 mA	VRRM, TJ = 25°C
Typical junction capacitance	CJ 220 pF	VR = 5.0V, TJ = 25°C

\*Pulse test: Pulse width 300 μsec, Duty cycle 2%

### Thermal and Mechanical Characteristics

Storage temperature range	TSTG	-65°C to 150°C
Operating junction temp range	TJ	-65°C to 125°C
Maximum thermal resistance L = 3/8"	RθJL	60°C/W Junction to lead
L = 0"	RθJC	30°C/W Junction to case
Weight		.049 ounces (1.4 grams) typical

# MSL245

Figure 1  
Typical Forward Characteristics

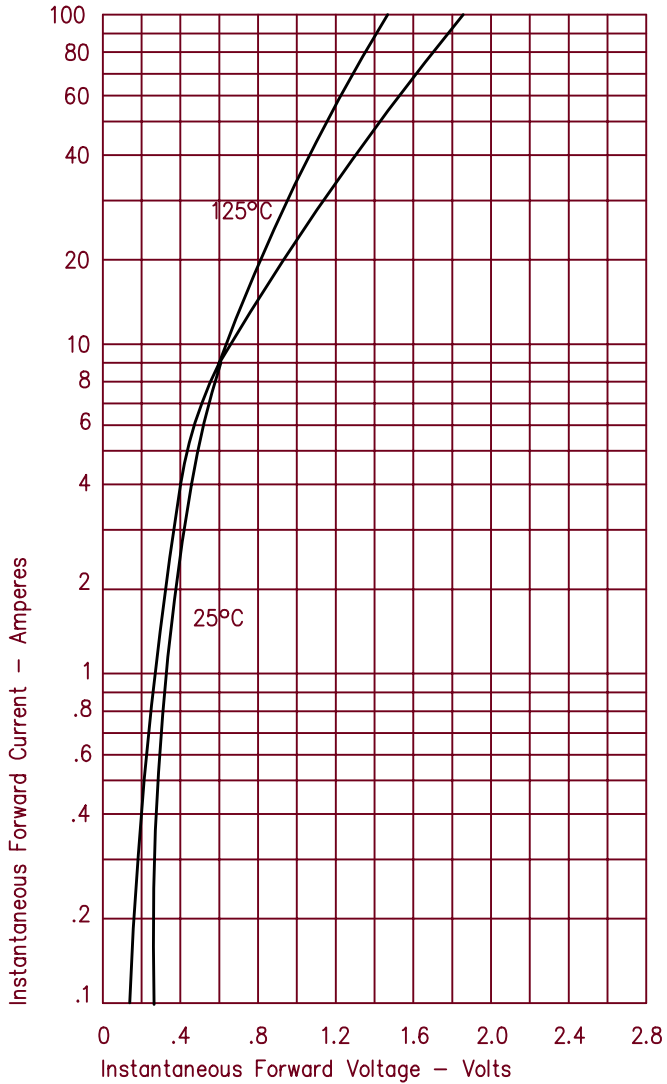


Figure 3  
Typical Junction Capacitance

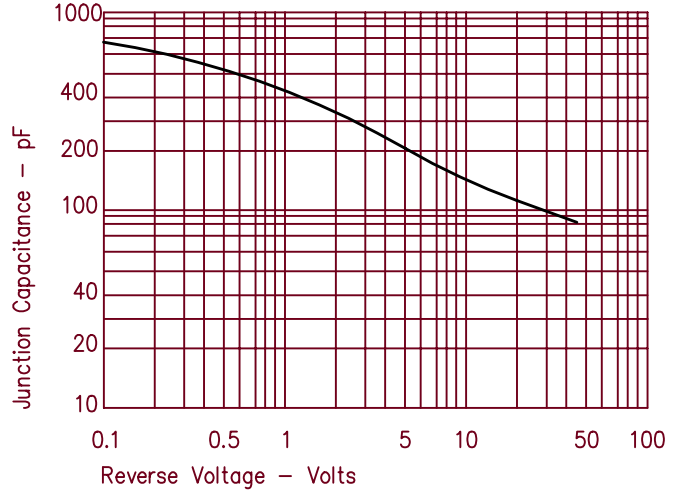


Figure 2  
Typical Reverse Characteristics

