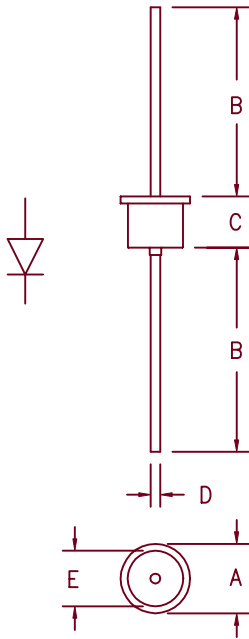


# 5 Amp Schottky Rectifier

## 1N5823, 1N5824, 1N5825



Dim.	Inches		Millimeter		Notes
	Minimum	Maximum	Minimum	Maximum	
A	---	.450	---	11.43	Dia.
B	.980	---	24.89	---	
C	---	.300	---	7.62	
D	.046	.056	1.17	1.42	Dia.
E	---	.350	---	8.89	Dia.

Microsemi Catalog Number	Working Peak Reverse Voltage	Repetitive Peak Reverse Voltage	<ul style="list-style-type: none"> <li>• Schottky Barrier Rectifier</li> <li>• 125°C Junction temperature</li> <li>• <math>V_{RRM}</math> 20 to 40 Volts</li> <li>• 5 Amp current rating</li> <li>• Very low forward voltage</li> <li>• JAN, JANTX, JANTXV &amp; JANS equivalent screening available</li> </ul>
1N5823	20V	20V	
1N5824	30V	30V	
1N5825	40V	40V	

### Electrical Characteristics

		1N5823	1N5824	1N5825	$T_L = 85^\circ\text{C}$ , square wave, $R_{\theta JL} = 12^\circ\text{C/W}$ 8.3ms, half sine, $T_J = 125^\circ\text{C}$ $I_{FM} = 3.0\text{A}; T_J = 25^\circ\text{C}^*$ $I_{FM} = 5.0\text{A}; T_J = 25^\circ\text{C}^*$ $I_{FM} = 15.7\text{A}; T_J = 25^\circ\text{C}^*$ $V_{RRM}, T_J = 25^\circ\text{C}$ $V_{RRM}, T_J = 100^\circ\text{C}$ $V_R = 5.0\text{V}, T_J = 25^\circ\text{C}$
Average forward current	$I_F(AV)$	5.0A	5.0A	5.0A	
Maximum surge current	$I_{FSM}$	500A	500A	500A	
Max peak forward voltage	$V_{FM}$	.330V	.340V	.350V	
Max peak forward voltage	$V_{FM}$	.360V	.370V	.380V	
Max peak forward voltage	$V_{FM}$	.470V	.490V	.520V	
Max peak reverse current	$I_{RM}$	10mA	10mA	10mA	
Max peak reverse current	$I_{RM}$	100mA	125mA	150mA	
Typical junction capacitance	$C_J$	1470pF	1470pF	1470pF	

\*Pulse test: Pulse width 300  $\mu\text{sec}$ , Duty cycle 2%

### Thermal and Mechanical Characteristics

Storage temperature range	$T_{STG}$	-65°C to 125°C
Operating junction temp range	$T_J$	-65°C to 125°C
Maximum thermal resistance	$L = 1/4"$ $R_{\theta JL}$	12°C/W Junction to lead
Weight		.08 ounces (2.4 grams) typical

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Figure 1  
Typical Forward Characteristics

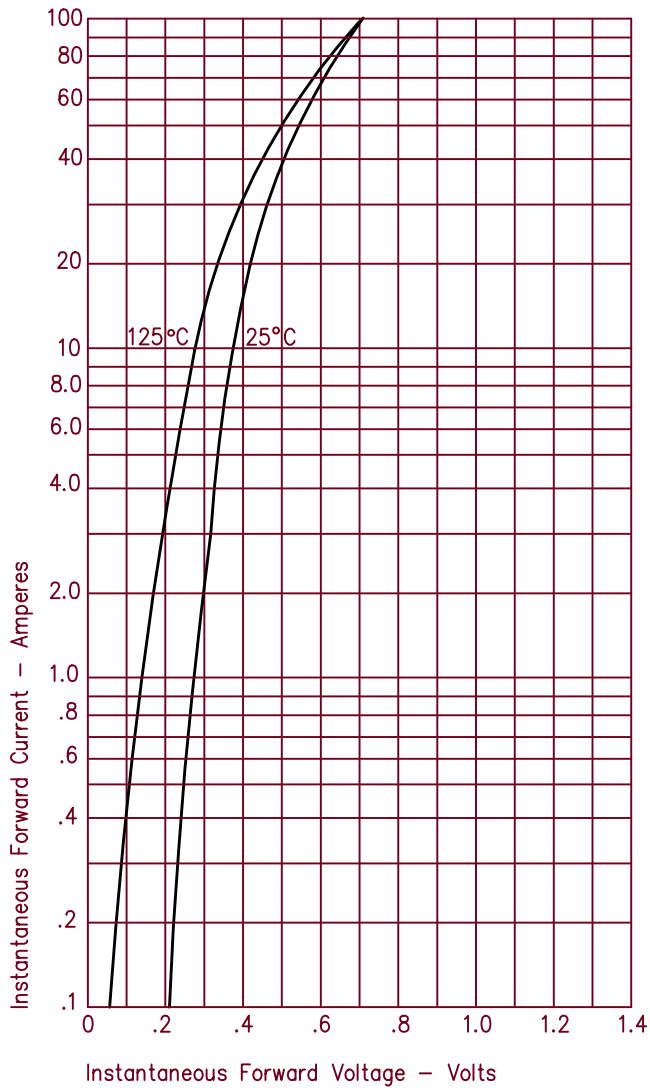


Figure 3  
Typical Junction Capacitance

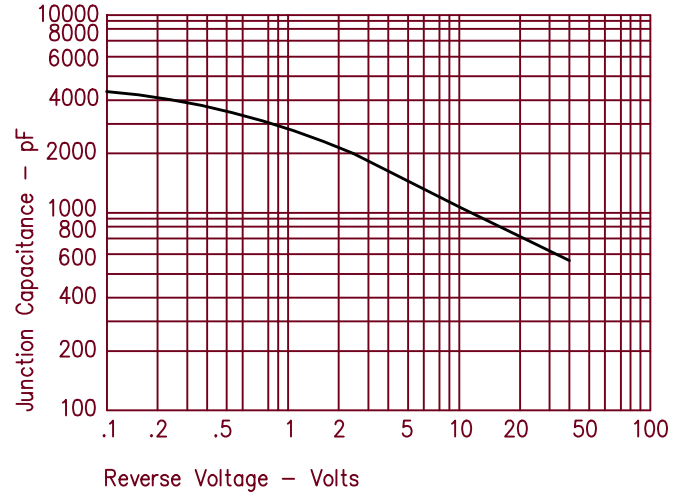


Figure 2  
Typical Reverse Characteristics

