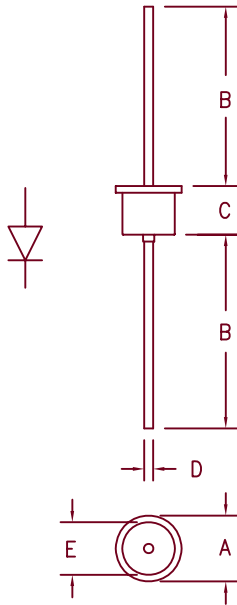


# 5 Amp Schottky Rectifier

## 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
1N5823	20V	20V
1N5824	30V	30V
1N5825	40V	40V

- Schottky Barrier Rectifier
- 125°C Junction temperature
- $V_{RRM}$  20 to 40 Volts
- 5 Amp current rating
- Very low forward voltage
- JAN, JANTX, JANTXV & JANS equivalent screening available

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

\*Pulse test: Pulse width 300  $\mu$ 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



6 Lake Street  
Lawrence, MA 01841  
PH: (978) 620-2600  
FAX: (978) 689-0803  
www.microsemi.com

05-09-07 Rev. 2

# 1N5823, 1N5824, 1N5825

Figure 1  
Typical Forward Characteristics

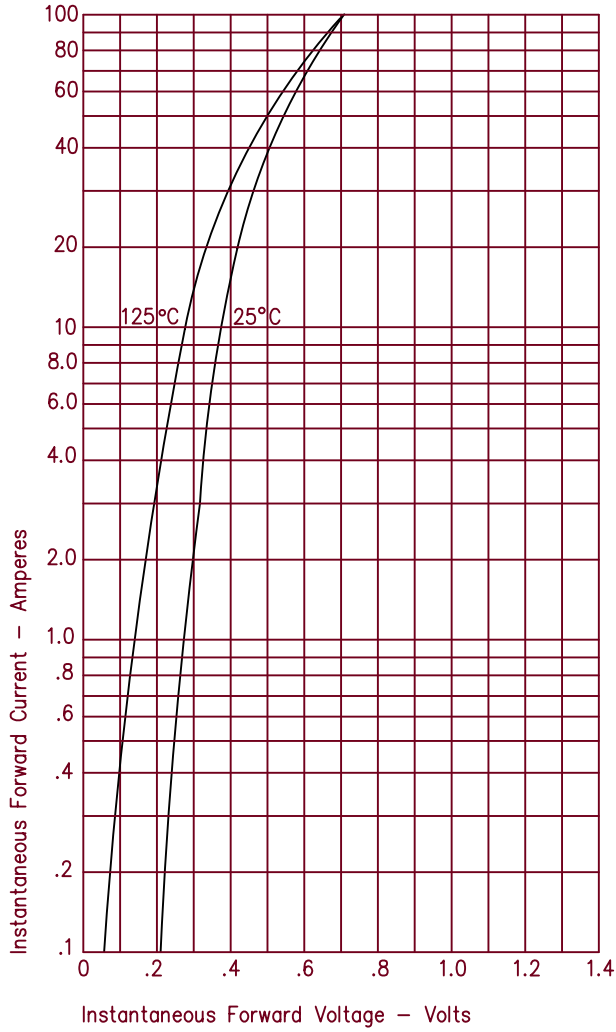


Figure 3  
Typical Junction Capacitance

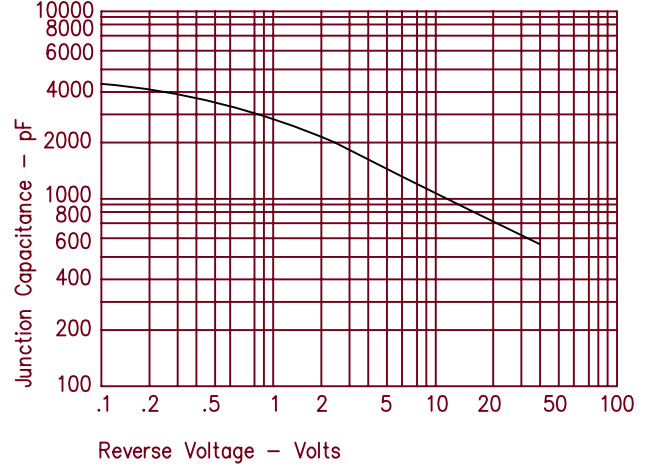


Figure 2  
Typical Reverse Characteristics

