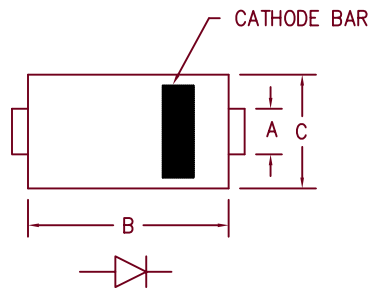
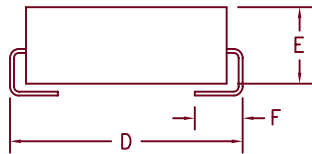


# 1 Amp Ultra Low Forward Voltage Schottky Rectifier LSM115J



| Dim. | Inches  |         | Millimeter |         | Notes |
|------|---------|---------|------------|---------|-------|
|      | Minimum | Maximum | Minimum    | Maximum |       |
| A    | .073    | .087    | 1.85       | 2.21    |       |
| B    | .160    | .180    | 4.06       | 4.57    |       |
| C    | .130    | .155    | 3.30       | 3.94    |       |
| D    | .205    | .220    | 5.21       | 5.59    |       |
| E    | .075    | .130    | 1.91       | 3.30    |       |
| F    | .030    | .060    | .760       | 1.52    |       |



## D0-214BA Package

| Microsemi<br>Catalog Number | Industry<br>Part Number | Working<br>Peak Reverse<br>Voltage | Repetitive<br>Peak Reverse<br>Voltage |
|-----------------------------|-------------------------|------------------------------------|---------------------------------------|
| LSM115J                     | 10BQ015                 | 15V                                | 15V                                   |

- Schottky Barrier Rectifier
- Guard Ring For Reverse Protection
- Low Power Loss, High Efficiency
- 100°C Junction Temperature
- VRRM 15V
- High Surge Capability
- Vf Less than .2V @ 1A @ 100°C
- Schottky OR'ing diode

## Electrical Characteristics

Average forward current  
Maximum surge current  
Maximum peak forward voltage  
Maximum peak reverse current  
Typical junction capacitance

$I_F(AV)$  1 Amps  
 $I_{FSM}$  50 Amps  
 $V_{FM}$  0.22 Volts  
 $I_{RM}$  10 mA  
 $C_J$  150pF

$T_L = 65^\circ\text{C}$ , Square wave,  $R_{\theta JL} = 15^\circ\text{C/W}$   
8.3ms, half sine,  $T_J = 100^\circ\text{C}$   
 $I_{FM} = 1.0A$ :  $T_J = 75^\circ\text{C}^*$   
 $V_{RRM} = 15V$ ,  $T_J = 25^\circ\text{C}$   
 $T_J = 25^\circ\text{C}$ ,  $V_R = 5V$

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

## Thermal and Mechanical Characteristics

Storage temperature range  
Operating junction temp range  
Maximum thermal resistance  
Weight

$T_{STG}$   
 $T_J$   
 $R_{\theta JL}$

$-55^\circ\text{C}$  to  $150^\circ\text{C}$   
 $-55^\circ\text{C}$  to  $100^\circ\text{C}$   
 $15^\circ\text{C/W}$  Junction to Lead  
.0047 ounces (.013 grams) typical



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05-15-07 Rev. 6

# LSM115J

Figure 1  
Typical Forward Characteristics

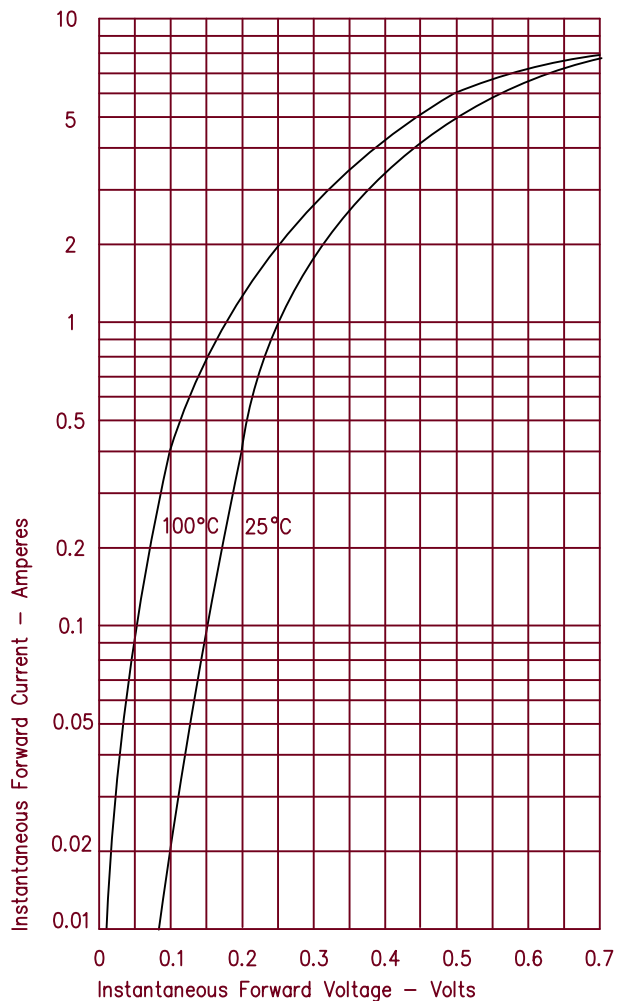


Figure 3  
Typical Junction Capacitance

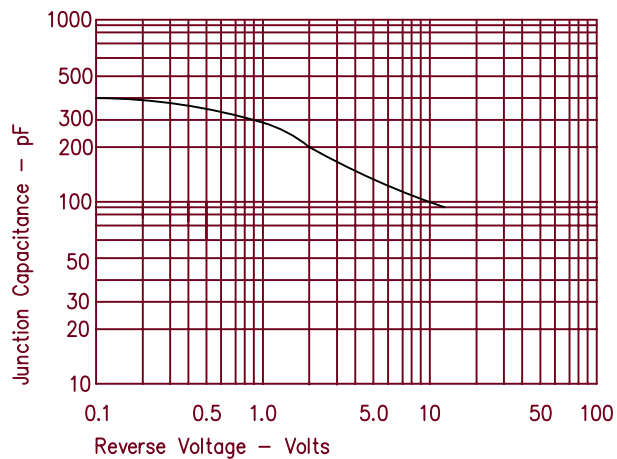


Figure 2  
Typical Reverse Characteristics

