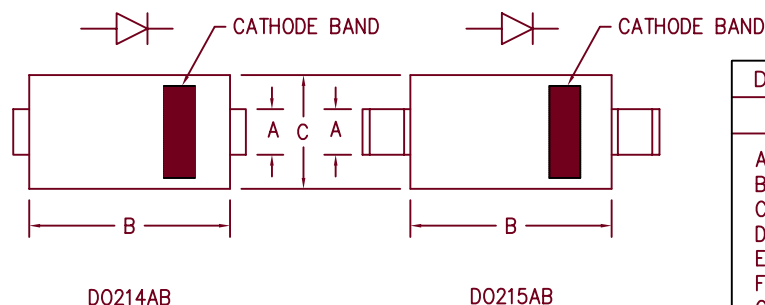
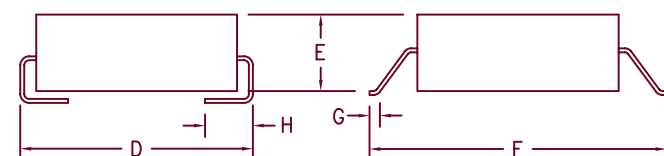


# 3 Amp Schottky Rectifier LSM335 — LSM345



| Dim. | Inches  |         | Millimeter |         | Notes |
|------|---------|---------|------------|---------|-------|
|      | Minimum | Maximum | Minimum    | Maximum |       |
| A    | .117    | .123    | 2.97       | 3.12    |       |
| B    | .260    | .280    | 6.60       | 7.11    |       |
| C    | .220    | .245    | 5.59       | 6.22    |       |
| D    | .307    | .322    | 7.80       | 8.18    |       |
| E    | .075    | .095    | 1.91       | 2.41    |       |
| F    | .380    | .400    | 9.65       | 10.16   |       |
| G    | .025    | .040    | .640       | 1.02    |       |
| H    | .030    | .060    | .760       | 1.52    |       |



| Microsemi<br>Catalog Number | Industry<br>Part Number          | Working<br>Peak Reverse<br>Voltage | Repetitive<br>Peak Reverse<br>Voltage |
|-----------------------------|----------------------------------|------------------------------------|---------------------------------------|
| LSM335*                     |                                  | 35V                                | 35V                                   |
| LSM340*                     | 30BQ040<br>15MQ040N<br>MBRS340TR | 40V                                | 40V                                   |
| LSM345*                     |                                  | 45V                                | 45V                                   |

\* Add Suffix J for J Lead or G for Gull Wing Lead Configuration

- Schottky Barrier Rectifier
- Guard ring protection
- Low forward voltage
- 150°C Junction temperature
- Reverse energy tested

## Electrical Characteristics

|                              |                             |                                                 |
|------------------------------|-----------------------------|-------------------------------------------------|
| Average forward current      | I <sub>F(AV)</sub> 3.0 Amps | Square wave                                     |
| Maximum surge current        | I <sub>FSM</sub> 150 Amps   | 8.3ms, half sine, T <sub>J</sub> = 150°C        |
| Max peak forward voltage     | V <sub>FM</sub> .45 Volts   | I <sub>FM</sub> = 1.0A; T <sub>J</sub> = 25°C * |
| Max peak forward voltage     | V <sub>FM</sub> .52 Volts   | I <sub>FM</sub> = 3.0A; T <sub>J</sub> = 25°C * |
| Max peak forward voltage     | V <sub>FM</sub> .76 Volts   | I <sub>FM</sub> = 9.4A; T <sub>J</sub> = 25°C * |
| Max peak reverse current     | I <sub>RM</sub> 1.5 mA      | V <sub>RRM</sub> , T <sub>J</sub> = 25°C        |
| Typical junction capacitance | C <sub>J</sub> 265 pF       | V <sub>R</sub> = 5.0V, T <sub>J</sub> = 25°C    |

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

## Thermal and Mechanical Characteristics

|                               |                  |                                 |
|-------------------------------|------------------|---------------------------------|
| Storage temperature range     | T <sub>STG</sub> | -55°C to 175°C                  |
| Operating junction temp range | T <sub>J</sub>   | -55°C to 150°C                  |
| Maximum thermal resistance    | R <sub>ΘJL</sub> | 25°C/W Junction to lead         |
| Weight                        |                  | .008 ounces (.22 grams) typical |



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05-17-07 Rev. 3

# LSM335 — LSM345

Figure 1  
Typical Forward Characteristics

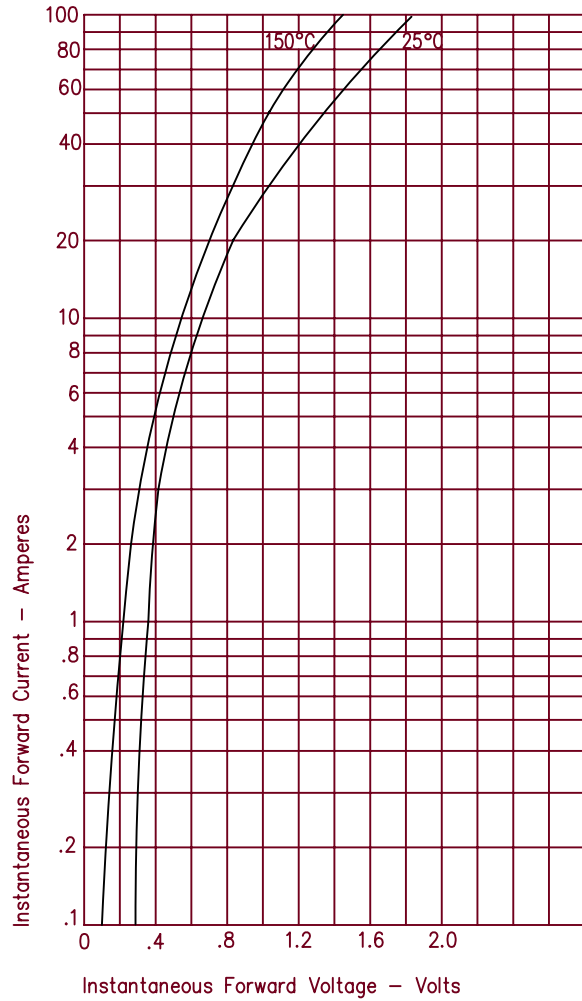


Figure 3  
Typical Junction Capacitance

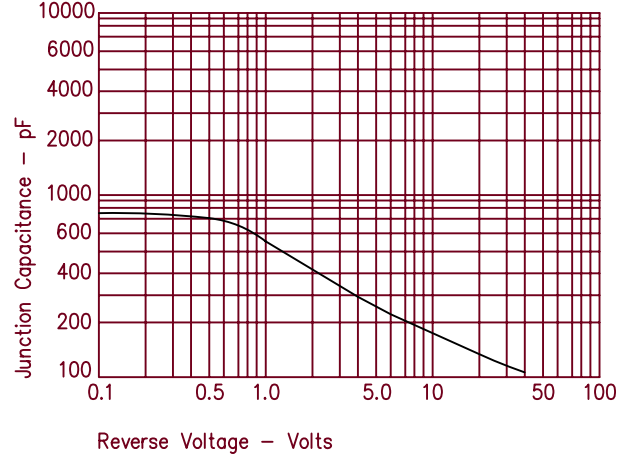


Figure 2  
Typical Reverse Characteristics

