

**SURFACE MOUNT SCHOTTKY BARRIER RECTIFIER**

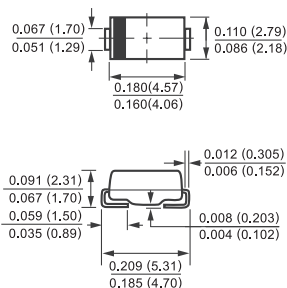
**VOLTAGE RANGE 20 to 40 Volts CURRENT 1.0 Ampere**

**FEATURES**

- \* Glass passivated device
- \* Ideal for surface mounted applications
- \* Low leakage current
- \* Metallurgically bonded construction
- \* Mounting position: Any
- \* Weight: 0.057 gram



**DO-214AC**



Dimensions in inches and (millimeters)

**MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS**

Ratings at 25 °C ambient temperature unless otherwise specified.  
Single phase, half wave, 60 Hz, resistive or inductive load.  
For capacitive load, derate current by 20%.

**MAXIMUM RATINGS** (At TA = 25°C unless otherwise noted)

| RATINGS                                                                                              | SYMBOL | FM120M       | FM140M | UNITS |
|------------------------------------------------------------------------------------------------------|--------|--------------|--------|-------|
| Maximum Recurrent Peak Reverse Voltage                                                               | VRRM   | 20           | 40     | Volts |
| Maximum RMS Voltage                                                                                  | VRMS   | 14           | 28     | Volts |
| Maximum DC Blocking Voltage                                                                          | VDC    | 20           | 40     | Volts |
| Maximum Average Forward Rectified Current<br>at Derating Lead Temperature                            | IO     | 1.0          |        | Amps  |
| Peak Forward Surge Current 8.3 ms single half sine-wave<br>superimposed on rated load (JEDEC method) | IFSM   | 40           |        | Amps  |
| Typical Thermal Resistance (Note 1)                                                                  | RθJA   | 50           |        | °C/W  |
| Typical Junction Capacitance (Note 2)                                                                | CJ     | 110          |        | pF    |
| Operating Temperature Range                                                                          | TJ     | -65 to + 125 |        | °C    |
| Storage Temperature Range                                                                            | TSTG   | -65 to + 150 |        | °C    |

**ELECTRICAL CHARACTERISTICS** (At TA = 25°C unless otherwise noted)

| CHARACTERISTICS                                                 | SYMBOL | FM120M | FM140M | UNITS |
|-----------------------------------------------------------------|--------|--------|--------|-------|
| Maximum Instantaneous Forward Voltage at 1.0A DC                | VF     | 0.36   | 0.38   | Volts |
| Maximum Average Reverse Current<br>at Rated DC Blocking Voltage | IR     | 1.0    |        | mAmps |
|                                                                 |        | 10     |        | mAmps |

NOTES : 1. Thermal Resistance (Junction to Ambient).  
2. Measured at 1 MHz and applied reverse voltage of 4.0 volts.  
3. P.C.B Monuted with 0.2X0.2" (5.0X5.0mm<sup>2</sup>) copper pad area.

