



Micro Commercial Components  
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## RB420D

### Features

- Low Turn-on Voltage
- Fast Switching
- PN Junction Guard Ring for Transient and ESD Protection

### Mechanical Data

- Case :SOT-346,Molded Plastic
- Terminals :Solderable per MIL-STD-202,Method 208
- Polarity :See Diagrams Below
- Weight :0.008 grams (approx)
- Mountion Position :Any

### Maximum Ratings

- Operating Temperature: -25°C to +125°C
- Storage Temperature: -40°C to +125°C

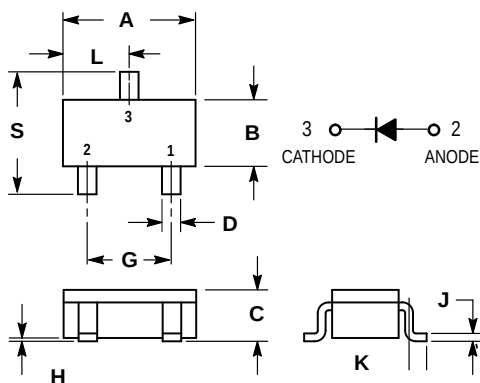
| MCC Catalog Number | Device Marking | Maximum Recurrent Peak Reverse Voltage | Maximum RMS Voltage | Maximum DC Blocking Voltage |
|--------------------|----------------|----------------------------------------|---------------------|-----------------------------|
| RB420D             | D3B            | 40V                                    | 28V                 | 40V                         |

### Electrical Characteristics @ 25°C Unless Otherwise Specified

|                                                         |             |       |                                                    |
|---------------------------------------------------------|-------------|-------|----------------------------------------------------|
| Average Forward Current                                 | $I_{F(AV)}$ | 0.1A  | $T_A = 25^\circ\text{C}$                           |
| Peak Forward Surge Current                              | $I_{FSM}$   | 1.0A  | 8.3ms, half sine                                   |
| Maximum Forward Voltage Drop Per Element<br>RB420D      | $V_F$       | 0.45V | $I_{FM} = 10\text{mA}$<br>$T_A = 25^\circ\text{C}$ |
| Maximum DC Reverse Current At Rated DC Blocking Voltage | $I_R$       | 1mA   | $T_A = 25^\circ\text{C}$<br>$V_R = 10\text{V}$     |

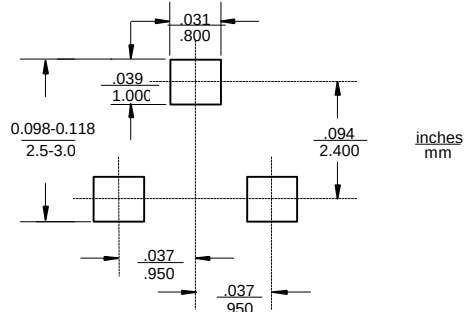
## 0.1 Amp Surface Mount Schottky Barrier Diode 40 Volts

### SOT-346



| DIM | INCHES |      | MM   |      | NOTE |
|-----|--------|------|------|------|------|
|     | MIN    | MAX  | MIN  | MAX  |      |
| A   | .106   | .122 | 2.70 | 3.10 |      |
| B   | .051   | .067 | 1.30 | 1.70 |      |
| C   | .039   | .051 | 1.00 | 1.30 |      |
| D   | .014   | .020 | 0.35 | 0.50 |      |
| G   | .067   | .091 | 1.70 | 2.30 |      |
| H   | .000   | .004 | 0.00 | 0.10 |      |
| J   | .004   | .010 | 0.10 | 0.26 |      |
| K   | .008   | .024 | 0.20 | 0.60 |      |
| L   | .049   | .065 | 1.25 | 1.65 |      |
| S   | .089   | .118 | 2.25 | 3.00 |      |

### Suggested Solder Pad Layout



# RB420D

## RATING AND CHARACTERISTIC CURVES

FIG.1-TYPICAL FORWARD  
CHARACTERISTICS

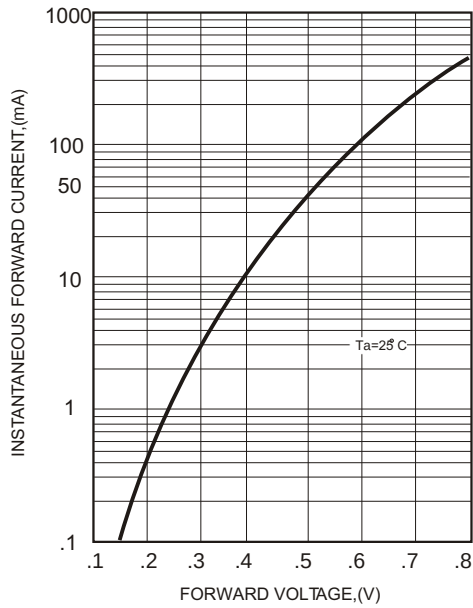


FIG.2-TYPICAL FORWARD CURRENT DERATING CURVE

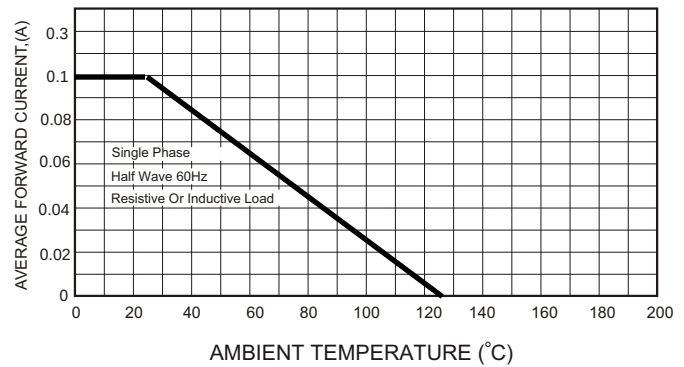


FIG.3 - TYPICAL REVERSE  
CHARACTERISTICS

