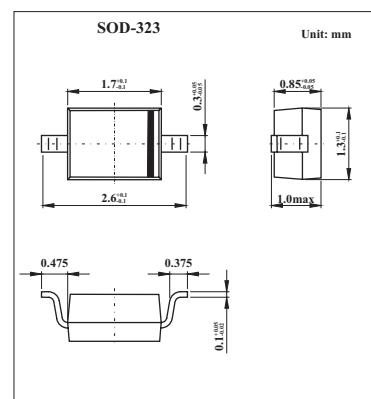


## Low-Voltage Variable Capacitance Diode BB156

### ■ Features

- Excellent linearity
- Very small plastic SMD package
- Very low series resistance.



### ■ Absolute Maximum Ratings Ta = 25°C

| Parameter                      | Symbol    | Rating     | Unit |
|--------------------------------|-----------|------------|------|
| continuous reverse voltage     | $V_R$     | 10         | V    |
| continuous forward current     | $I_F$     | 20         | mA   |
| storage temperature            | $T_{stg}$ | -55 to 150 | °C   |
| operating junction temperature | $T_J$     | -55 to 125 | °C   |

### ■ Electrical Characteristics Ta = 25°C

| Parameter               | Symbol                          | Test conditions   | Min  | Typ | Max  | Unit     |
|-------------------------|---------------------------------|---|------|-----|------|----------|
| reverse current         | $I_R$                           | $V_R = 10\text{ V}$   |      |     | 10   | nA       |
|                         |                                 | $V_R = 10\text{ V}; T_J = 85\text{ °C}$                             |      |     | 200  | nA       |
| diode series resistance | $r_s$                           | $f = 470\text{ MHz}; V_R$ is the value at which $C_d = 9\text{ pF}$ |      | 0.4 | 0.7  | $\Omega$ |
| diode capacitance       | $C_d$                           | $V_R = 1\text{ V}, f = 1\text{ MHz}$                                | 14.4 | 16  | 17.6 | pF       |
|                         |                                 | $V_R = 4\text{ V}, f = 1\text{ MHz}$                                | 7.6  | 8.6 | 9.6  | pF       |
|                         |                                 | $V_R = 7.5\text{ V}, f = 1\text{ MHz}$                              | 4.2  | 4.8 | 5.4  | pF       |
| capacitance ratio       | $\frac{C_{d(1V)}}{C_{d(7.5V)}}$ | $f = 1\text{ MHz}$  | 2.7  | 3.3 | 3.9  |          |

### ■ Marking

|         |    |
|---------|----|
| Marking | PF |
|---------|----|