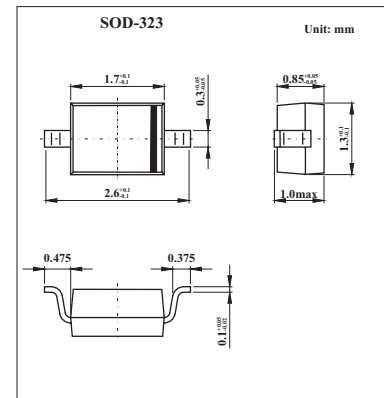


## Low-Voltage Variable Capacitance Diode

### KB156(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 <sub>R</sub>	10	V
continuous forward current	I <sub>F</sub>	20	mA
storage temperature	T <sub>stg</sub>	-55 to 150	°C
operating junction temperature	T <sub>J</sub>	-55 to 125	°C

#### ■ Electrical Characteristics Ta = 25°C

Parameter	Symbol	Test conditions	Min	Typ	Max	Unit
reverse current	I <sub>R</sub>	V <sub>R</sub> = 10 V			10	nA
		V <sub>R</sub> = 10 V; T <sub>J</sub> = 85 °C			200	nA
diode series resistance	r <sub>s</sub>	f = 470 MHz; V <sub>R</sub> is the value at which C <sub>d</sub> = 9 pF		0.4	0.7	Ω
diode capacitance	C <sub>d</sub>	V <sub>R</sub> = 1 V, f = 1 MHz	14.4	16	17.6	pF
		V <sub>R</sub> = 4 V, f = 1 MHz	7.6	8.6	9.6	pF
		V <sub>R</sub> = 7.5 V, f = 1 MHz	4.2	4.8	5.4	pF
capacitance ratio	$\frac{C_{d(1V)}}{C_{d(7.5V)}}$	f = 1 MHz	2.7	3.3	3.9	

#### ■ Marking

Marking	PF
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