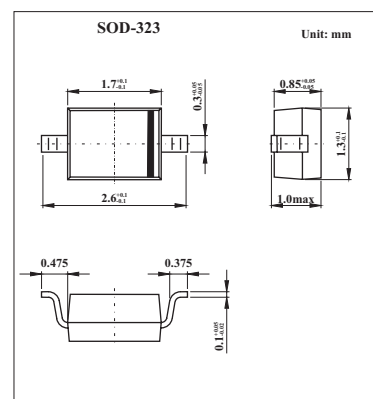


Low-Voltage Variable Capacitance Diode

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_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	Ω
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
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