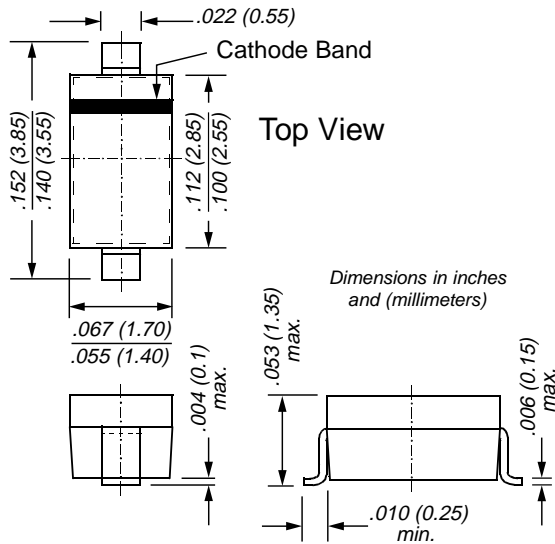
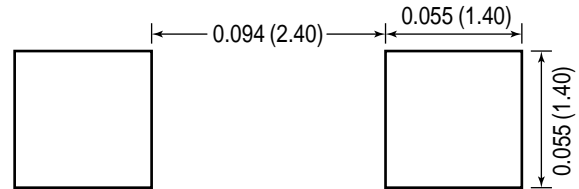




### SOD-123



### Pad Layout SOD-123



## Mechanical Data

**Case:** SOD-123 plastic case

**Weight:** approximately 0.01 grams

**Cathode Band Color:** Blue

**Packaging Codes/Options:**

D3/10K per 13" reel (8mm tape)

D4/3K per 7" reel (8mm tape)

## Features

- Silicon Epitaxial Planar Diode Switches
- For electric bandswitching in radio and TV tuners in the frequency range of 50...1000 MHz. The dynamic forward resistance is constant and very small over a wide range of frequency and forward current. The reverse capacitance is also small and largely independent of the reverse voltage.
- These diodes are also available in SOD-323 case with the type designations BA782S and BA783S.

## Maximum Ratings and Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Reverse Voltage	V <sub>R</sub>	35	V
Forward Continuous Current at T <sub>amb</sub> = 25°C	I <sub>F</sub>	100	mA
Junction Temperature	T <sub>j</sub>	125	°C
Storage Temperature Range	T <sub>s</sub>	-55 to +125	°C

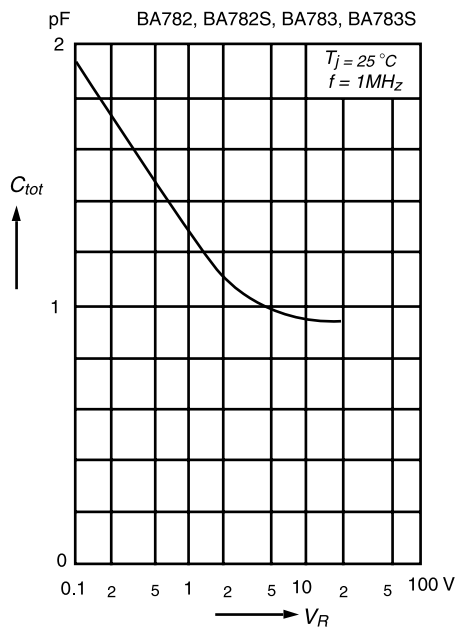
### Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	Test Condition	Min	Typ	Max	Unit
Forward Voltage	$V_F$	$I_F = 100 \text{ mA}$	—	—	1	V
Leakage Current	$I_R$	$V_R = 20 \text{ V}$	—	—	50	nA
Dynamic Forward Resistance	$r_f$	$f = 50 \dots 1000 \text{ MHz}, I_F = 3 \text{ mA}$	—	—	0.7	$\Omega$
		$f = 50 \dots 1000 \text{ MHz}, I_F = 10 \text{ mA}$	—	—	1.2	
Capacitance	$C_{tot}$	$V_R = 1 \text{ V}, f = 1 \text{ MHz}$	—	—	1.5	pF
		$V_R = 3 \text{ V}, f = 1 \text{ MHz}$	—	—	1.25	
Series Inductance across Case	$L_S$	—	—	2.5	—	nH

### Ratings and Characteristic Curves

Capacitance versus reverse voltage



Dynamic forward resistance versus forward voltage

