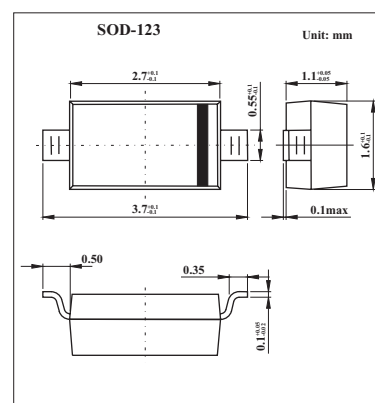


## Bandswitching Diodes

### BA782; BA783

#### ■ Features

- Silicon Epitaxial Planar Diode Switches
- For high-speed switching application 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.



#### ■ Absolute Maximum Ratings $T_a = 25^\circ\text{C}$

Parameter	Symbol	Value	Unit
Reverse Voltage	$V_R$	35	V
Forward Continuous Current at $T_{amb} = 25^\circ\text{C}$	$I_F$	100	mA
Junction Temperature	$T_j$	125	$^\circ\text{C}$
Storage Temperature Range	$T_s$	-55 to +150	$^\circ\text{C}$

#### ■ Electrical Characteristics $T_a = 25^\circ\text{C}$

Parameter	Symbol	Min	Typ	Max	Unit
Forward Voltage at $I_F = 100\text{ mA}$	$V_{(BR)}$			1	V
Leakage Current at $V_R = 20\text{ V}$	$I_R$			50	nA
Dynamic Forward Resistance at $f = 50\text{ to }1000\text{ MHz}$ , $I_F = 3\text{ mA}$	$r_f$			0.7	$\Omega$
BA783				1.2	
at $f = 50\text{ to }1000\text{ MHz}$ , $I_F = 10\text{ mA}$	$C_{tot}$			0.5	pF
BA782				0.9	
Capacitance at $V_R = 1\text{ V}$ , $f = 1\text{ MHz}$	$C_{tot}$			1.5	pF
BA783				1.25	
Series Inductance across Case	$L_s$		2.5		nH