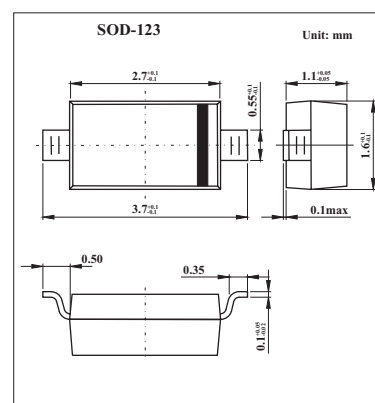


Bandswitching Diodes

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	Ω
BA783				1.2	
at $f = 50\text{ to }1000\text{ MHz}$, $I_F = 10\text{ mA}$				0.5	
BA783				0.9	
Capacitance at $V_R = 1\text{ V}$, $f = 1\text{ MHz}$	C_{tot}			1.5	pF
BA782				1.25	
BA783				1.2	
Series Inductance across Case	L_s		2.5		nH