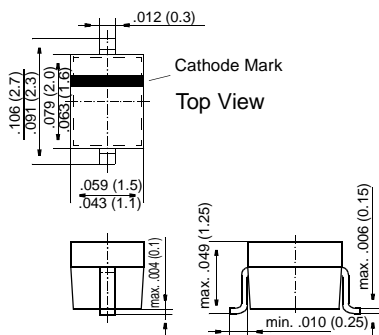


BA782S, BA783S


Bandswitching Diodes

SOD-323



Dimensions in inches and (millimeters)

FEATURES

- ◆ Silicon Epitaxial Planar Diode Switches 
- ◆ For electronic 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-123 case with the type designations BA782 and BA783.

MECHANICAL DATA

Case: SOD-323 Plastic Package
Weight: approx. 0.004 g

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

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

BA782S, BA783S

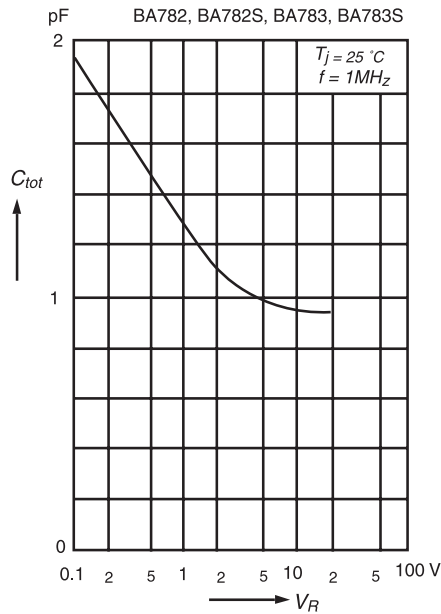
ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage at $I_F = 100 \text{ mA}$	V_F	–	–	1	V
Leakage Current at $V_R = 20 \text{ V}$	I_R	–	–	50	nA
Dynamic Forward Resistance at $f = 50 \text{ to } 1000 \text{ MHz}$, $I_F = 3 \text{ mA}$ at $f = 50 \text{ to } 1000 \text{ MHz}$, $I_F = 10 \text{ mA}$	BA782S r_f	–	–	0.7	Ω
	BA783S r_f	–	–	1.2	Ω
	BA782S r_f	–	–	0.5	Ω
	BA783S r_f	–	–	0.9	Ω
Capacitance at $V_R = 1 \text{ V}$, $f = 1 \text{ MHz}$ at $V_R = 3 \text{ V}$, $f = 1 \text{ MHz}$	BA782S C_{tot}	–	–	1.5	pF
	BA783S C_{tot}	–	–	1.25	pF
	BA783S C_{tot}	–	–	1.2	pF
Series Inductance across Case	L_S	–	2.5	–	nH

RATINGS AND CHARACTERISTIC CURVES BA782S, BA783S

Capacitance
versus reverse voltage



Dynamic forward resistance
versus forward voltage

