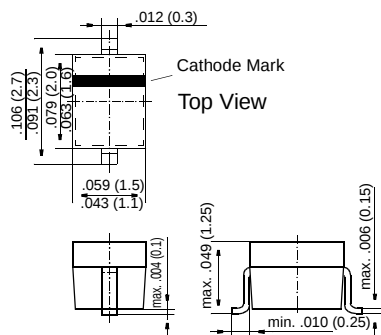


BA782S, BA783S

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

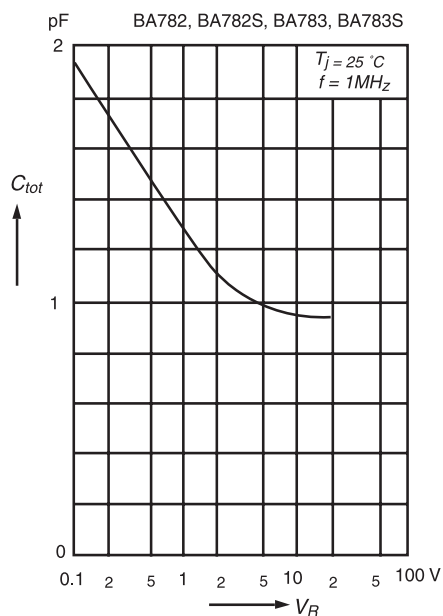
ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

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

