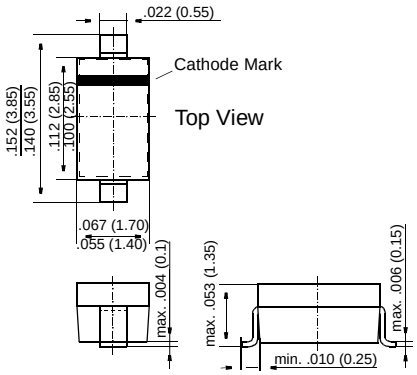
BA782, BA783

Bandswitching Diodes

SOD-123



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-323 case with the type designations BA782S and BA783S.

MECHANICAL DATA

Case: SOD-123 Plastic Case
Weight: approx. 0.01 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 °C	I_F	100	mA
Junction Temperature	T_j	125	°C
Storage Temperature Range	T_S	−55 to +125	°C

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BA782, BA783

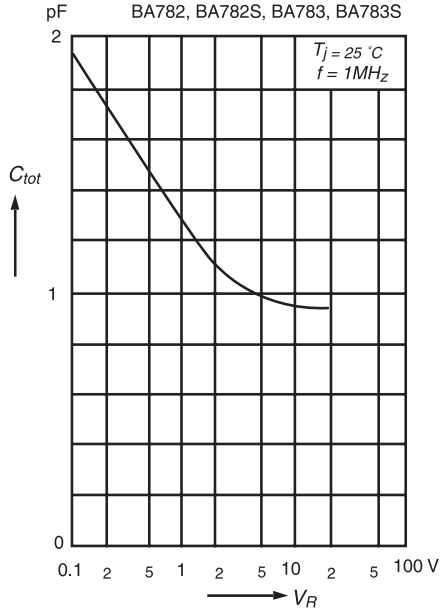
ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

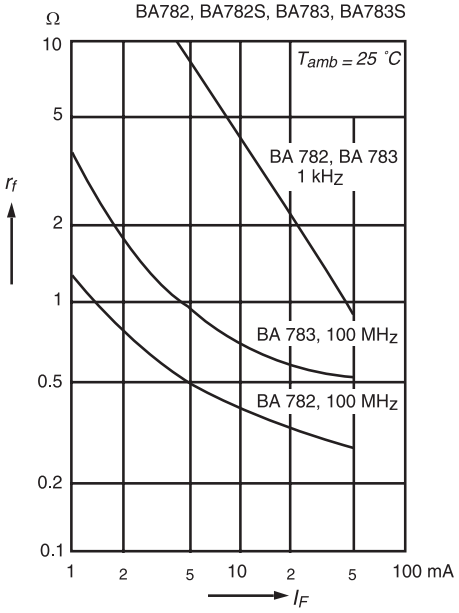
		Symbol	Min.	Typ.	Max.	Unit
Forward Voltage at I_F = 100 mA		V_F	–	–	1	V
Leakage Current at V_R = 20 V		I_R	–	–	50	nA
Dynamic Forward Resistance						
at f = 50 to 1000 MHz, I_F = 3 mA	**BA782**	r_f	–	–	0.7	Ω
	BA783	r_f	–	–	1.2	Ω
at f = 50 to 1000 MHz, I_F = 10 mA	**BA782**	r_f	–	–	0.5	Ω
	BA783	r_f	–	–	0.9	Ω
Capacitance						
at V_R = 1 V, f = 1 MHz		C_{tot}	–	–	1.5	pF
at V_R = 3 V, f = 1 MHz	**BA782**	C_{tot}	–	–	1.25	pF
	BA783	C_{tot}	–	–	1.2	pF
Series Inductance across Case		L_S	–	2.5	–	nH

RATINGS AND CHARACTERISTIC CURVES BA782, BA783

Capacitance
versus reverse voltage



Dynamic forward resistance
versus forward voltage



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