

Band Switching Diode

Mechanical Data:

Case: SOD-123 plastic case

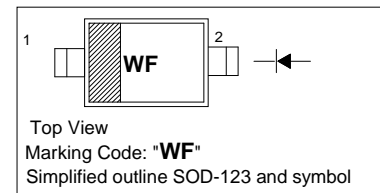
Description:

Silicon Epitaxial Planar Diode Switches

For electric band switching in radio and TV tuners in the frequency range of (50 to 1000) MHz.

PINNING

PIN	DESCRIPTION
1	Cathode
2	Anode



Absolute Maximum Ratings (Ta=25°C)

Parameter	Symbol	Limits	Unit
Reverse voltage	V_R	35	V
Forward continuous current	I_F	100	mA
Junction temperature	T_J	125	°C
Storage temperature	T_{stg}	-55 to +125	°C

Electrical Characteristics (Ta=25°C)

Parameter	Symbol	Min	Typ	Max	Unit	Conditions
Forward voltage	V_F	-	-	1.0	V	$I_F=100mA$
Leakage current	I_R	-	-	50	nA	$V_R=20V$
Capacitance	C_{tot}	-	-	1.5	pF	$V_R=1V, f=1MHz$
		-	-	1.25		$V_R=3V, f=1MHz$
Dynamic forward resistance	r_f	-	-	0.7	Ω	$f=(50 \text{ to } 1000)MHz, I_F=3mA$
		-	-	0.5		$f=(50 \text{ to } 1000)MHz, I_F=10mA$
Series inductance across case	L_S	-	2.5	-	nH	-

Typical Characteristics ($T_{amb} = 25\text{ }^{\circ}\text{C}$ unless otherwise specified)

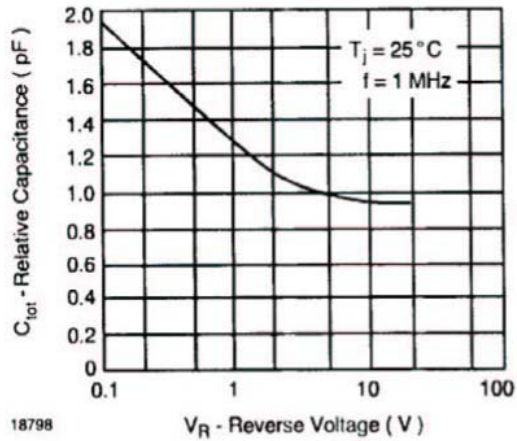


Figure 1. Capacitance vs. Reverse Voltage

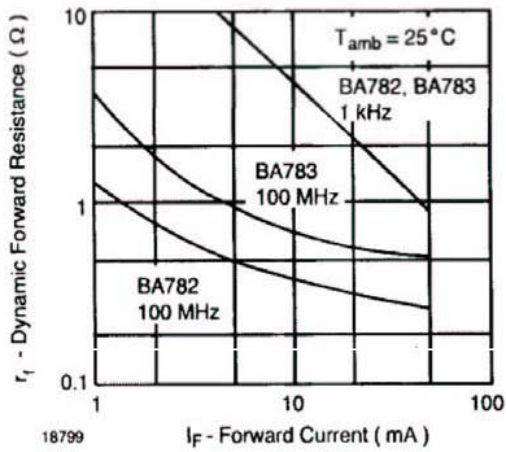


Figure 2. Dynamic Forward Resistance vs. Forward Current