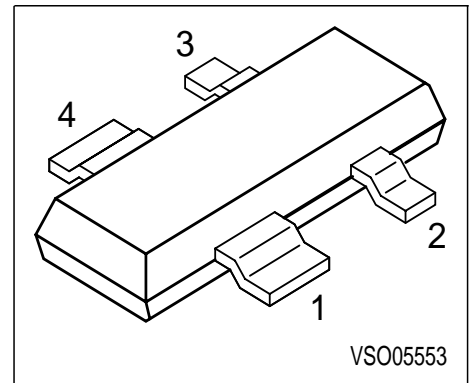


Silicon RF Switching Diodes

- Design for use in shunt configuration
- High shunt signal isolation
- Low shunt insertion loss



Type	Marking	Pin Configuration				Package
BAR81	BBs	1 = C	2 = A	3 = C	4 = A	MW-4

Maximum Ratings

Parameter	Symbol	Value	Unit
Diode reverse voltage	V_R	30	V
Forward current	I_F	100	mA
Junction temperature	T_j	150	°C
Operating temperature range	T_{op}	-55 ... 125	
Storage temperature	T_{stg}	-55 ... 150	

Electrical Characteristics at $T_A = 25^\circ\text{C}$, unless otherwise specified.

Parameter	Symbol	Values			Unit
		min.	typ.	max.	
DC characteristics					
Reverse current $V_R = 20\text{ V}$	I_R	-	-	20	nA
Forward voltage $I_F = 100\text{ mA}$	V_F	-	0.93	1	V
AC characteristics					
Diode capacitance $V_R = 1\text{ V}, f = 1\text{ MHz}$ $V_R = 3\text{ V}, f = 1\text{ MHz}$	C_T	-	0.6 0.57	-	pF
Forward resistance $I_F = 5\text{ mA}, f = 100\text{ MHz}$	r_f	-	0.7	-	Ω
Series inductance chip to ground	L_S	-	0.15	-	nH

Configuration of the shunt-diode

- A perfect ground is essential for optimum isolation
- The anode pins should be used as passage for RF

