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1. Operating Conditions

PARAMETER	SYMBOL	MIN	MAX	UNIT
Supply voltage	V_{CC}	+1.80	+15	Vdc
Current	I_{CC}		2	mA
R Open	R_O	-	> 30	MOhm
R Closed	R_C	< 100	-	Ohm
Operating ambient temperature	T_{amb}	-20	+70	°C

* Current consumption is determined by the resistance of the application circuit and the supply voltage. The sensor is fully passive, requires no signal conditioning, and operates with currents as low as 0.2 μ A.
(e.g. max. I_{CC} 0.2 μ A at V_{CC} 2V and R 10Meg)
(e.g. max. I_{CC} 2.0 μ A at V_{CC} 2V and R 1Meg)

2. Soldering Process

Reflow Soldering Process 260°C, 10 sec

3. Functionality

A mobile, gilded micro sphere is located inside the hollow space of the sensor. When moving, the micro sphere bridges two gilded contacts by switching over from a high resistive to a low resistive state. When the Sensor is at rest, it is **not necessarily closed**. Only in 70% - 99% of time the sensor will be closed when at rest.

The figure shows the typical characteristics of the sensor in excitation and rest.

