

## Silicone Keypad contact Pills

A TOUCH BETTER	Carbon pill	SC pill  Best Solution Combination of advantages from LR and Gold pill	Low Resistance (LR) pill (Expiring technology)	1. Silicon app. 0.5 2. Cu 0.1 mm 3. Ni 1.5 - 2μ 4. Au 0.15 - 06 μ <b>Gold pill</b> (Only for special application)
Short Description	Carbon based silicone pill co- molded with keypad	Today's best alternative to all low resistance solutions  SC-L for most applications (20mA)  SC-M for medium current application (300mA)  Co-molded with Keypad	Low resistance carbon based silicone pill, co- molded with keypad	Very low resistance gold plated pill     Used for resistance cascading
Advantages	Standard process     High no. of     actuation cycles	<ul> <li>Very low contact resistance</li> <li>Distinct contact</li> <li>Very robust pill against defects/dirt</li> <li>Best priceperformance ratio</li> </ul>	<ul> <li>Low contact resistance</li> <li>High no. of actuation cycles</li> <li>Low dirt sensitivity</li> </ul>	Very low contact resistance Distinct contact Nigh no. of actuation cycles
Considerations	Standard contact resistance     Contact resistance depending on contact force	Pill diameter >2.5 mm	<ul> <li>Medium costs</li> <li>Contact resistance depending on contact force</li> </ul>	<ul> <li>High costs</li> <li>Sensitive to contamination</li> <li>Pill diameter &gt;2.5 mm</li> <li>Round pill shape only</li> </ul>
Key Tech. Data Resistance [Ω]  Diameter [mm] No. of cycles [#]	• < <b>100</b> • 2.5, 3.0, 3.5, 4.0, 5.0 • Approx. 500'000	<ul> <li>&lt; 1.5 (Ø 2.5mm)</li> <li>&lt; 1 (Ø &gt;2.5mm)</li> <li>2.5, 3.0, 3.5, 4.0</li> <li>Approx. 500'000</li> </ul>	<ul> <li>&lt; 20</li> <li>2.5, 3.0, 3.5, 4.0, 5.0</li> <li>Approx. 500'000</li> </ul>	• < 1 • 2.5, 3.0, 3.5, 4.0 • Approx. 1 million
Minimal Customer Input	<ul> <li>Contact resistance in Ω</li> <li>No. of actuation cycles</li> <li>Pill size Ø or drawing of contact area for special shapes</li> <li>Operating voltage and current</li> <li>Contact layout PCB</li> </ul>			
Our Strengths	<ul> <li>Knowledge about best alternative for optimal solution, incl. PCB layout</li> <li>Extensive material knowledge</li> <li>Highest quality of raw materials</li> </ul> Abatek International AG, Switzerland I saleseurone@abatek.com   Phone: +41.44.843.11.11			

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