Operation Switch Assembly

Technology to Inspire Innovation
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The Operation Switch Assembly is a custom module that realizes operational components of mobile devices to be individually configured to match product designs.
Switches can be constructed as required on flexible printed circuit boards such as FPCs and membranes. Durable and reliable mechanisms are guaranteed through stress analysis and various simulation techniques. Optimized switch modules are provided with operational feel harmonized with your devices.
Switch assemblies constructed on FPCs are particularly suitable for products that require high contact reliability, whereas those built on membrane circuit boards are appropriate for compositions with resistive-printed variable resistors.
Key-top and other exterior components can be decorated to match product design, by means of plating, vapor deposition or painting.
As an important element part, we have a wide variety of metal dome switches that are components of push switches, different in dome diameter and operation force. The metal dome switch features both wide suitable spot for compensating assembly error and multi-contact points that ensure reliable electrical continuity.

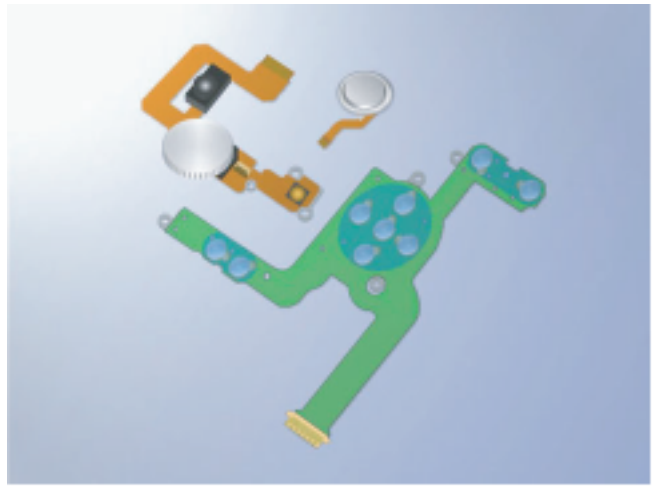


Image of example products.

Features

- Switches perfectly suited for product designs can be built on flexible PCBs.
- Sure operational feel optimized for your product.
- FPCs and membrane circuit boards can be used as substrates.
- Exterior parts can be decorated with plating or vapor deposition to be harmonized with your product design.

Applications

Mobile Phone, Digital Still Camera, Digital Video Camcorder

Example of Reference Specifications

Tactile Push Switches

Operating Force	1.2 - 2.5 N
Travel	0.13 - 0.18 mm
Contact Rating	1 mA (5 VDC)
Insulation Resistance	100 megohms min. (100 VDC)
Contact Resistance	100 ohms max.
Bounce	10 ms max.

Mode Dial

Rotate Angle	360 degrees
Number of Clicks	8 - 16
Contact Rating	1 mA (5 VDC)

Release Switch

Operating Force	1st Step	0.7 - 1.6 N
	2nd Step	2.0 - 2.5 N
Travel	1st Step	0.13 - 0.18 mm
	2nd Step	0.25 - 0.35 mm
Contact Rating		1 mA (5VDC)
Insulation Resistance		100 megohms min. (100 VDC)
Contact Resistance		100 ohms max.
Bounce		10 ms max.

Contact Pitch of Tail

FPC Type	0.3 mm
Membrane Type	0.5 mm

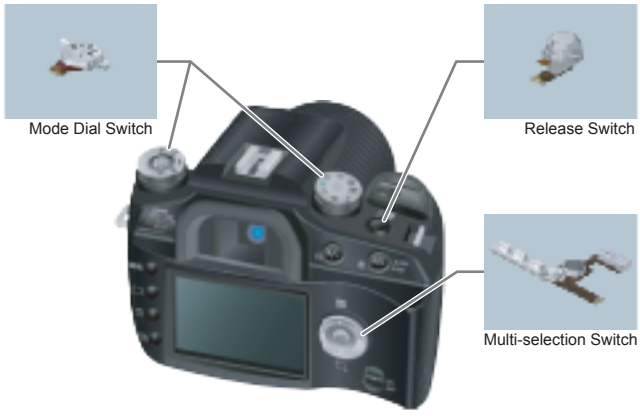
Decoration

Decoration Techniques	Painting, printing, plating, vapor deposition

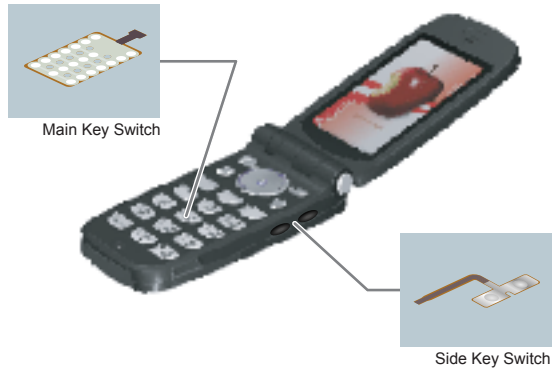
Customized Made-to-order Product

Examples of Applications

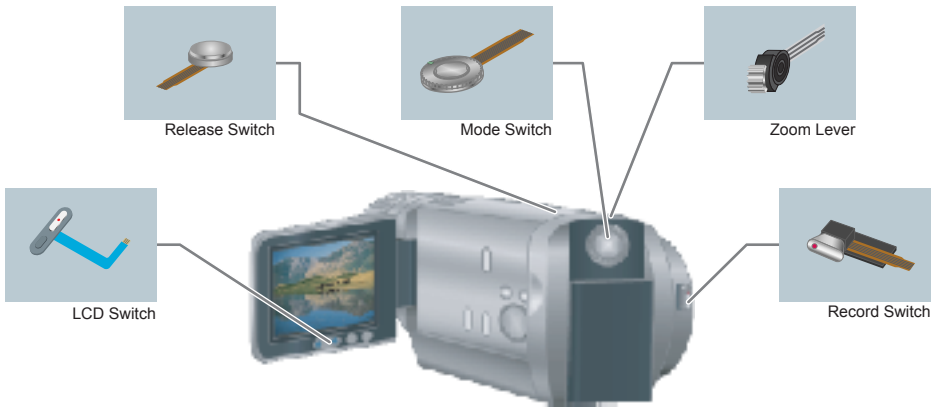
Digital Still Camera



Mobile Phone



Digital Video Camcoder



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