

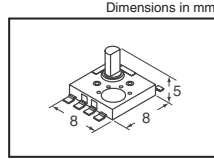
## C&K TPA Series SMT Navigation Switches



Actuating the shaft in the up, down, right or left direction individually closes four momentary contacts which provide the scanning function.

**Specifications:**

- **Switching:** Voltage Maximum: 24V
- **Current Maximum:** Silver: 50mA; Gold: 10mA
- **Operating Temperature:** Silver: -40°C ~ 85°C; Gold: -40°C ~ 110°C
- **Life Expectancy:** 200,000 operations Push to select = 400gF



Description	Digi-Key Part No.	Cut Tape Price Each			T & R Pricing† 1,000	C&K Part No.
		1	25	100		
Momentary, 4-Directional with Selection, 185gF, Silver, Gullwing	401-1130-1-ND	1.29	1.19	1.09	712.26	TPA511GLFS
Cap Switch Black Plastic for TPA	401-1997-NDØ	.70	.57	.45	—	BOUTON TPA

† For Tape and Reel part number, change 1-ND to 2-ND. Ø Bulk

## KSA Series Sealed Tact Switches

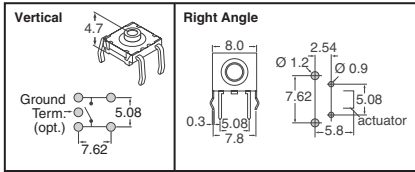


Miniature tact switch is designed for automatic or manual insertion.

**Specifications:**

- **Circuit:** SPST-NO
- **Switching:** Current Maximum: Silver: 50mA; Gold: 10mA
- **Voltage Maximum:** 32VDC
- **Contact Resistance:** 100mΩ
- **Operating Temperature:** Silver: -40°C ~ 90°C; Gold: -40°C ~ 125°C

MARK II Versions are washable



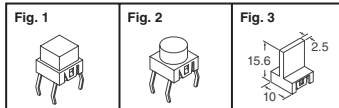
Description	Digi-Key Part No.	Price Each			C&K Part No.
		1	25	100	
Vertical, 6.2mm sq., 130gF, Mark II Sealed, Long Life, Gold	401-1812-ND	.36	.33	.29	KSA0M332LFT
Vertical, 6.2mm sq., 300gF, Mark II Sealed, Gold	401-1815-ND	.53	.49	.45	KSA0M432LFT
Vertical, 7.4mm sq., 130gF, Mark I Sealed	401-1807-ND	.42	.39	.36	KSA0M211LFT
Vertical, 7.4mm sq., 130gF, Mark I Sealed, Long Life	401-1809-ND	.42	.39	.36	KSA0M311LFT
Vertical, 7.4mm sq., 130gF, Mark I Sealed, Long Life, Gold	401-1811-ND	.54	.50	.46	KSA0M331LFT
Vertical, 7.4mm sq., 300gF, Mark I Sealed	401-1813-ND	.42	.39	.36	KSA0M411LFT
Vertical, 7.4mm sq., 300gF, Sealed, Gold	CKN9955-ND	.50	.40	.32	KSA0M431LFT
Vertical, 7.4mm sq., 500gF, Mark I Sealed	401-1816-ND	.46	.43	.40	KSA0M511LFT
Vertical, 7.4mm sq., 300gF, Sealed, Silver	CKN9954-ND	.43	.35	.28	KSA0M911LFT
Vertical, 7.4mm sq., 130gF, with Ground	401-1823-ND	.49	.46	.42	KSA1M211LFT
Vertical, 7.4mm sq., 130gF, Long Life, with Ground	401-1824-ND	.49	.46	.42	KSA1M311LFT
Vertical, 7.4mm sq., 130gF, Mark I Sealed, Gold, with Ground	401-1825-ND	.70	.65	.60	KSA1M331LFT
Vertical, 7.4mm sq., 300gF, with Ground	401-1826-ND	.49	.46	.42	KSA1M411LFT
Right Angle, 8.0mm sq., 130gF, Mark I Sealed	401-1818-ND	.54	.50	.46	KSA0V211LFT
Right Angle, 8.0mm sq., 130gF, Mark I Sealed, Long Life	401-1819-ND	.54	.50	.46	KSA0V311LFT

## KSA Series Snap-On Switch Caps (Mark I Version Only)



Snap-on buttons for vertical KSA switches snap over and are held in place by the KSA body. All buttons must be mounted after the soldering and cleaning process. Buttons may be screen printed for custom legend appearances.

Note: Switch sold separately



Color	Digi-Key Part No.	Price Each			C&K Part No.
		1	25	100	
<b>Fig. 1 — 10mm Square Cap</b>					
Black	401-1237-ND	.35	.32	.30	BTNK0190
Red	401-1238-ND	.35	.32	.30	BTNK0140
Light Grey	401-1239-ND	.35	.32	.30	BTNK0120
Dark Grey	401-1240-ND	.35	.32	.30	BTNK0110
Yellow	401-1241-ND	.49	.45	.42	BTNK0130
Blue	401-1242-ND	.35	.32	.30	BTNK0160
Green	401-1243-ND	.47	.44	.40	BTNK0150
Ivory	401-1244-ND	.50	.47	.43	BTNK0180
Grey-Blue	401-1245-ND	.35	.32	.30	BTNK0170
<b>Fig. 2 — 8mm Round Cap</b>					
Black	401-1246-ND	.35	.32	.30	BTNK0290
Red	401-1247-ND	.35	.32	.30	BTNK0240
Light Grey	401-1248-ND	.35	.32	.30	BTNK0220
Dark Grey	401-1249-ND	.35	.32	.30	BTNK0210
Yellow	401-1250-ND	.35	.32	.30	BTNK0230
Blue	401-1251-ND	.35	.32	.30	BTNK0260
Green	401-1252-ND	.35	.32	.30	BTNK0250
Ivory	401-1253-ND	.35	.32	.30	BTNK0280
Grey-Blue	401-1254-ND	.35	.32	.30	BTNK0270
<b>Fig. 3 — 10 X 2.5mm Handle</b>					
Black	CKN9831-ND	.40	.32	.26	BTNK0690

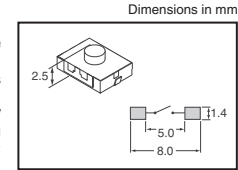
## KSR Series Low Profile Tact Switches



The KSR Series Switches are a miniature tact switch. The extremely small overall dimensions make the KSR fit perfectly in small applications where density of components is a major constraint.

- **Applications:** Cellular phones • Recorders • Computers • Pointers • Radios • Medical instrumentation • Car entry remote

- **Specifications:** • **Circuit:** SPST-NO • **Switching:** Voltage Minimum/Maximum: 20mV/32V • **Current:** Silver: 50mA; Gold: 50mA • **Operating Temperature:** Silver: -40°C ~ 85°C; Gold: -40°C ~ 125°C • **Contact Material:** Gold and Silver Plated



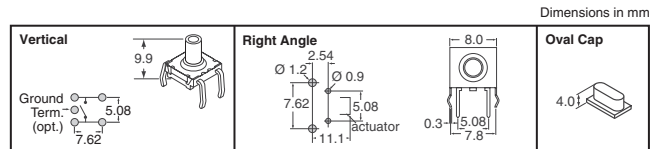
Description	Digi-Key Part No.	Cut Tape Price Each			T & R Pricing† 2,500	C&K Part No.
		1	25	100		
180gF, Gullwing, SMD, Silver	401-1702-1-ND	.44	.41	.38	242.38/M	KSR211GLFS
200gF, Gullwing, SMD, Silver	401-1703-1-ND	.52	.49	.45	289.96/M	KSR221GLFS
200gF, Gullwing, SMD, Gold	401-1704-1-ND	.61	.57	.52	337.55/M	KSR223GLFG
200gF, Gullwing, SMD, Gold	401-1705-1-NDØ	.88	.82	.75	489.22/M	KSR223GNCLFG
300gF, Gullwing, SMD, Silver	401-1706-1-ND	.44	.41	.38	242.38/M	KSR231GLFS
300gF, Gullwing, SMD, Gold	CKN10283CT-ND§	.61	.57	.52	337.55/M	KSR233G LFG
450gF, Gullwing, SMD, Silver	401-1707-1-ND	.53	.49	.45	292.94/M	KSR251GLFS
450gF, Gullwing, SMD, Gold	401-1708-1-ND	.70	.65	.60	389.59/M	KSR253GLFG
<b>Long Life Version</b>						
300gF, Gullwing, SMD, Silver	CKN9190CT-ND	.46	.43	.40	—	KSR232G LFS
450gF, Gullwing, SMD, Gold	CKN9193CT-ND	.64	.59	.54	—	KSR254G LFG

Ø Normally Closed ‡ For Tape and Reel part number, change 1-ND to 2-ND. § For Tape and Reel part number, change CT-ND to TR-ND.

## KSL Series Tact Switches (Washable)



MARK II Versions are improved seal versions for immersed cleaning. **Specifications:** • **Circuit:** SPST-NO • **Switching:** Voltage Maximum: 50VDC • **Current Maximum:** Silver: 50mA; Gold: 10mA • **Contact Resistance:** 50mΩ • **Contact Material:** Silver plated • **Operating Temperature:** Silver: -40°C ~ 90°C; Gold: -40°C ~ 125°C

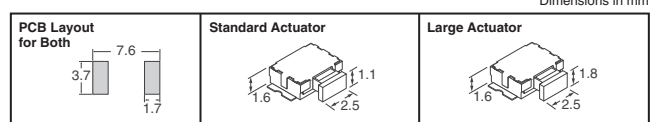


Description	Digi-Key Part No.	Price Each			C&K Part No.
		1	25	100	
Vertical, 130gF, Totally Sealed	401-1828-ND	.50	.47	.43	KSL0M211LFT
Vertical, 130gF, Mark II Sealed	401-1829-ND	.50	.46	.43	KSL0M212LFT
Vertical, 130gF, Mark II Sealed, Long Life	401-1831-ND	.50	.46	.43	KSL0M312LFT
Vertical, 300gF, Totally Sealed	401-1833-ND	.50	.47	.43	KSL0M411LFT
Vertical, 300gF, Mark II Sealed	401-1834-ND	.50	.46	.43	KSL0M412LFT
Vertical, 300gF, Flux Sealed, Gold	401-1835-ND	.64	.60	.55	KSL0M431LFT
Vertical, 130gF, Totally Sealed, with Ground	401-1843-ND	.58	.54	.49	KSL1M211LFT
Vertical, 300gF, Totally Sealed, Long Life	401-1839-ND	.65	.60	.55	KSL0V311LFT
Right Angle, 130gF, Totally Sealed	401-1841-ND	.65	.60	.55	KSL0V411LFT
Oval Cap, 9.5mm x 5.6mm, Black	401-1424-ND	.35	.32	.30	BTNK0390

## KSS Series Miniature Side Actuated Tact Switches



**Specifications:** • **Circuit:** SPST-NO • **Switching:** Maximum Voltage: 50V • **Current:** Minimum/Maximum Silver: 1mA/50mA; Gold: 1mA/10mA • **Life Expectancy:** 10<sup>7</sup> operations • **Operating Temperature:** Silver: -40°C ~ 85°C; Gold: -40°C ~ 125°C



Description	Digi-Key Part No.	Cut Tape Price Each			Tape & Reel Pricing† 3,000	C&K Part No.
		1	25	100		
Standard Actuator, 200gF, Gullwing	401-1097-1-ND	.43	.40	.37	239.41/M	KSS221GLFS
Standard Actuator, 200gF, Gullwing, Gold	401-1522-1-ND	.60	.56	.52	334.57/M	KSS223GLFG
Standard Actuator, 250gF, Gullwing	401-1098-1-ND	.43	.40	.37	239.41/M	KSS231GLFS
Standard Actuator, 250gF, Gullwing, Gold	401-1698-1-ND	.60	.56	.47	—	KSS233GLFG
Standard Actuator, 400gF, Gullwing	401-1099-1-ND	.43	.40	.37	239.41/M	KSS241GLFS
Standard Actuator, 400gF, Gullwing, Gold	401-1523-1-ND	.60	.56	.52	—	KSS243GLFG
Large Actuator, 200gF, Gullwing	401-1100-1-ND	.50	.46	.42	273.61/M	KSS321GLFS
Large Actuator, 250gF, Gullwing	401-1101-1-ND	.50	.46	.42	273.61/M	KSS331GLFS
Large Actuator, 400gF, Gullwing	401-1102-1-ND	.50	.46	.42	273.61/M	KSS341GLFS

† For Tape and Reel part number, change 1-ND to 2-ND.

Digi-Reel® Most SMT cutdown parts are available on a Digi-Reel®. For Digi-Reel part number, change 1-ND to 6-ND or CT-ND to DKR-ND. See Digi-Key® Services on page 2 for additional information.

Free shipping on orders over €65! All prices in euro and include duties. (EU2011-EN) 2207