

# CK ROTARY SWITCH

## GENERAL ELECTRICAL & MECHANICAL SPECIFICATION

|                            |  |
|----------------------------|--|
| Switch Rating:             | 150mA@250V ac/dc resistive load                    |
| Current Carrying Capacity  | 5A non switching                                   |
| Life:                      | >10,000 Cycles                                     |
| Operating Temperature:     | -30°C to +85 °C                                    |
| Proof Voltage:             | 1,500Vac (Initial)                                 |
| Insulation Resistance:     | >999 MΩ at 500Vdc (Initial)                        |
| Contact Resistance:        | <20 mΩ (initial)                                   |
| Operating Torque (nominal) | Standard 8.6 ± 1 cNm<br>Light Action 3.5 ± 0.5 cNm |
| End Stop Torque (nominal): | 0.80 Nm  |
| Moulding Material:         | Polyamide 6.6 G.F.                                 |
| Contact/Terminal Material: | Brass CZ108 Ag Plated                              |

## RoHS COMPLIANT



## GENERAL FEATURES & OPTIONS

- Made in UK
- Cost effective single wafer switch
- Moulded 27.5mm diameter
- Standard 30° indexing
- Solder or Printed Circuit Board Terminals
- Up to 4 poles per switch
- Maximum 12 positions
- Shorting (make before break 30° indexing only) or non shorting (break before make) contacts.
- Adjustable stop to restrict number of positions
- Special options: 60° or 90° indexing, continuous rotation,
- Optional reinforcement ring.
- Fixed stop, UL-V0 rated material, gold flashed or gold plated contacts, and spindles with special flats, slots or knurls.
- No Bush versions available
- Rear Drive versions available
- Sealed PCB Termination available

## CK ROTARY SWITCH SPECIFICATION SHEET



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**IMPORTANT** WAFERS FLATS & SLOTS VIEWED FROM THE FRONT OF SWITCH IN EXTREME ANTICLOCKWISE POSITION (POSITION 1)

SPINDLE FLAT ANGLE - AVAILABLE IN 15° INCREMENTS

SCREWDRIVER SLOT - AVAILABLE IN 45° INCREMENTS



## ORDERING CODE FOR NON-STANDARD SWITCHES



SPINDLE LENGTH  
FMF IN FULL MM

| Index Angles & NO. OF POLES | NO OF WAYS (POSITIONS) |         | MBB or BBM | Contact Type | Contact Plating | SPINDLE DIAM. | SPINDLE FLAT DEPTH | BUSH DIAM. | LENGTH OF SPINDLE FLAT |   |    |    | ANGLE OF FLAT (°) |   |     |     |     |
|-----------------------------|------------------------|---------|------------|--------------|-----------------|---------------|--------------------|------------|------------------------|---|----|----|-------------------|---|-----|-----|-----|
|                             |                        |         |            |              |                 |               |                    |            | A                      | 2 | N  | 15 | A                 | 0 | N   | 195 |     |
| A 30° 1Pole                 | A                      | 2       | A          | BBM          | Solder          | A             | 6mm                | Nil        | M10                    | A | 2  | N  | 15                | A | 0   | N   | 195 |
| B                           | B                      | 3       | B          | MBB          | Solder          | B             | 6mm                | 5mm        | M10                    | B | 3  | O  | No Flat           | B | 15  | O   |     |
| C                           | C                      | 4       | C          | BBM          | PCB             | C             | 6.35mm             | Nil        | 9.52 mm                | C | 4  | P  | 16                | C | 30  | P   | 210 |
| D                           | D                      | 5       | D          | MBB          | PCB             | D             | 6.35mm             | 5.5mm      | 9.52 mm                | D | 5  | Q  | 17                | D | 45  | Q   | 225 |
| E 60° 1Pole                 | E                      | 6       | E          | BBM          | Solder          | E             | 6mm                | Nil        | M10                    | E | 6  | R  | 18                | E | 60  | R   | 240 |
| F                           | F                      | 7       | F          | MBB          | Solder          | F             | 6mm                | 5mm        | M10                    | F | 7  | S  | 19                | F | 75  | S   | 255 |
| G                           | G                      | 8       | G          | BBM          | PCB             | G             | 6.35mm             | Nil        | 9.52 mm                | G | 8  | T  | 20                | G | 90  | T   | 270 |
| H                           | H                      | 9       | H          | MBB          | PCB             | H             | 6.35mm             | 5.5mm      | 9.52 mm                | H | 9  | U  | 21                | H | 105 | U   | 285 |
| I 90° 1Pole                 | I                      | 10      | I          | BBM          | Solder          | I             | 6mm                | Nil        | M10                    | I | 10 | V  | 22                | I | 120 | V   | 300 |
| J                           | J                      | 11      | J          | MBB          | Solder          | J             | 6mm                | 5mm        | M10                    | J | 11 | W  | 23                | J | 135 | W   | 315 |
| K                           | K                      | 12      | K          | BBM          | PCB             | K             | 6.35mm             | 5.5mm      | 9.52 mm                | K | 12 | X  | 24                | K | 150 | X   | 330 |
| Z No Stop                   | Z                      | No Stop | L          | MBB          | PCB             | L             | 6mm                | 5mm        | M10                    | L | 13 | Y  | 25                | L | 165 | Y   | 345 |
|                             |                        |         |            |              |                 | M             | 6.35mm             | 5.5mm      | 9.52 mm                | M | 14 | Z  | Full              | M | 180 |     |     |

PLEASE COMPLETE THE SPECIFICATION DRAWING IF YOUR REQUIREMENTS CANNOT BE FULLILLED BY USING THE ORDERING CODE

# CK ROTARY SWITCH

## STANDARD PART NUMBERS

| BASIC TYPES | SPINDLE DIAMETER | SPINDLE LENGTH FROM MOUNTING FACE | 8mm LONG BUSH | SPINDLE FLAT LENGTH | ANGLE OF SPINDLE FLAT | SPINDLE FLAT THICKNESS |
|-------------|------------------|-----------------------------------|---------------|---------------------|-----------------------|------------------------|
| IMPERIAL    | 6.35mm           | 38mm                              | 9.52 x 32TPI  | 30mm                | 90°                   | 5.5mm                  |
| METRIC      | 6.00mm           | 50mm                              | M10 x 0.75    | No Flat             | ---                   | ---                    |

| CIRCUITRY AT 30° INDEXING               | PLATING FINISH | STANDARD METRIC |                    | STANDARD IMPERIAL |                    |
|---|----------------|-----------------|--------------------|-------------------|--------------------|
|   |                | Shorting (MBB)  | Non-Shorting (BBM) | Shorting (MBB)    | Non-Shorting (BBM) |
| <b>1 POLE 12 POSITION</b>               |                |                 |                    |                   |                    |
| STOP INCLUDED                           |                |                 |                    |                   |                    |
| Solder Tag                              | Silver         | CK1039          | CK1029             | CK1034            | CK1024             |
|   | Gold Flash     | CK1508          | CK1503             | CK1516            | CK1520             |
|   | Gold Plate     | CK2444          | CK1672             | CK2458            | CK2459             |
| Printed Circuit                         | Silver         | CK1059          | CK1049             | CK1054            | CK1044             |
|   | Gold Flash     | CK1512          | CK1506             | CK1524            | CK1528             |
|   | Gold Plate     | CK1475          | CK1312             | CK2460            | CK2461             |
| <b>1 POLE 12 POSITION</b>               |                |                 |                    |                   |                    |
| ----- NO STOP CONTINUOUS ROTATION ----- |                |                 |                    |                   |                    |
| Solder Tag                              | Silver         | CK1038          | CK1028             | CK1033            | CK1023             |
|   | Gold Flash     | CK1533          | CK1537             | CK1541            | CK1545             |
|   | Gold Plate     | CK2445          | CK2446             | CK2462            | CK2463             |
| Printed Circuit                         | Silver         | CK1058          | CK1048             | CK1053            | CK1043             |
|   | Gold Flash     | CK1534          | CK1538             | CK1542            | CK1546             |
|   | Gold Plate     | CK2447          | CK2448             | CK2464            | CK2465             |
| <b>2 POLE 6 POSITION</b>                |                |                 |                    |                   |                    |
| STOP INCLUDED                           |                |                 |                    |                   |                    |
| Solder Tag                              | Silver         | CK1040          | CK1030             | CK1035            | CK1025             |
|   | Gold Flash     | CK1509          | CK1496             | CK1517            | CK1521             |
|   | Gold Plate     | CK2449          | CK1726             | CK2466            | CK2467             |
| Printed Circuit                         | Silver         | CK1060          | CK1050             | CK1055            | CK1045             |
|   | Gold Flash     | CK1513          | CK1473             | CK1525            | CK1529             |
|   | Gold Plate     | CK2450          | CK1850             | CK2468            | CK2469             |
| <b>2 POLE 6 POSITION</b>                |                |                 |                    |                   |                    |
| ----- NO STOP CONTINUOUS ROTATION ----- |                |                 |                    |                   |                    |
| Solder Tag                              | Silver         | CK1114          | CK1118             | CK1120            | CK1121             |
|   | Gold Flash     | CK1535          | CK1539             | CK1543            | CK1547             |
|   | Gold Plate     | CK2451          | CK2452             | CK2470            | CK2471             |
| Printed Circuit                         | Silver         | CK1119          | CK1113             | CK1122            | CK1089             |
|   | Gold Flash     | CK1536          | CK1540             | CK1544            | CK1548             |
|   | Gold Plate     | CK2453          | CK2454             | CK2472            | CK2473             |
| <b>3 POLE 4 POSITION</b>                |                |                 |                    |                   |                    |
| STOP INCLUDED                           |                |                 |                    |                   |                    |
| Solder Tag                              | Silver         | CK1041          | CK1031             | CK1036            | CK1026             |
|   | Gold Flash     | CK1510          | CK1504             | CK1518            | CK1522             |
|   | Gold Plate     | CK2455          | CK1577             | CK2474            | CK2475             |
| Printed Circuit                         | Silver         | CK1061          | CK1051             | CK1056            | CK1046             |
|   | Gold Flash     | CK1514          | CK1500             | CK1526            | CK1530             |
|   | Gold Plate     | CK2456          | CK1952             | CK2476            | CK2477             |
| <b>4 POLE 3 POSITION</b>                |                |                 |                    |                   |                    |
| STOP INCLUDED                           |                |                 |                    |                   |                    |
| Solder Tag                              | Silver         | CK1042          | CK1032             | CK1037            | CK1027             |
|   | Gold Flash     | CK1511          | CK1505             | CK1519            | CK1523             |
|   | Gold Plate     | CK1673          | CK1822             | CK2478            | CK2479             |
| Printed Circuit                         | Silver         | CK1062          | CK1052             | CK1057            | CK1047             |
|   | Gold Flash     | CK1515          | CK1507             | CK1527            | CK1531             |
|   | Gold Plate     | CK2457          | CK1953             | CK2480            | CK2481             |

# CK ROTARY SWITCH

## SPECIFICATION SHEET

CUSTOMER TO COMPLETE OR DELETE AS REQUIRED



|          | A     | B | C             |
|----------|-------|---|---------------|
| IMPERIAL | Ø6.35 |   | Ø9.52 x 32TPI |
| METRIC   | Ø6.00 |   | M10 x 0.75    |

|          | D | E | F |
|----------|---|---|---|
| IMPERIAL |   |   |   |
| METRIC   |   |   |   |

| INDEXING  |     |     |     | INDEXING  |     |     |     | INDEXING  |     |     |     | INDEXING  |     |     |     |
|-----------|-----|-----|-----|-----------|-----|-----|-----|-----------|-----|-----|-----|-----------|-----|-----|-----|
|           |     |     |     |           |     |     |     |           |     |     |     |           |     |     |     |
| 1 POLE    |     |     |     | 2 POLE    |     |     |     | 3 POLE    |     |     |     | 4 POLE    |     |     |     |
| POSITIONS |     |     |     | POSITIONS |     |     |     | POSITIONS |     |     |     | POSITIONS |     |     |     |
| MBB       | BBM | SOL | PCB | MBB       | BBM | SOL | PCB | MBB       | BBM | SOL | PCB | MBB       | BBM | SOL | PCB |

**IMPORTANT!** WAFERS FLATS & SLOTS VIEWED FROM THE FRONT OF SWITCH IN EXTREME ANTICLOCKWISE POSITION (POSITION 1)

SPECIAL REQUIREMENTS

**OPTIONS** Stops are adjustable 2-12 positions. Continuous rotation (No Stops) available. Make before break (MBB) or Break before Make (BBM) rotors available. Solder Tag (SOL) or PCB pin (PCB) – indicate on wafer.

CUSTOMER:

DATE:

CUSTOMER REFERENCE NUMBER: