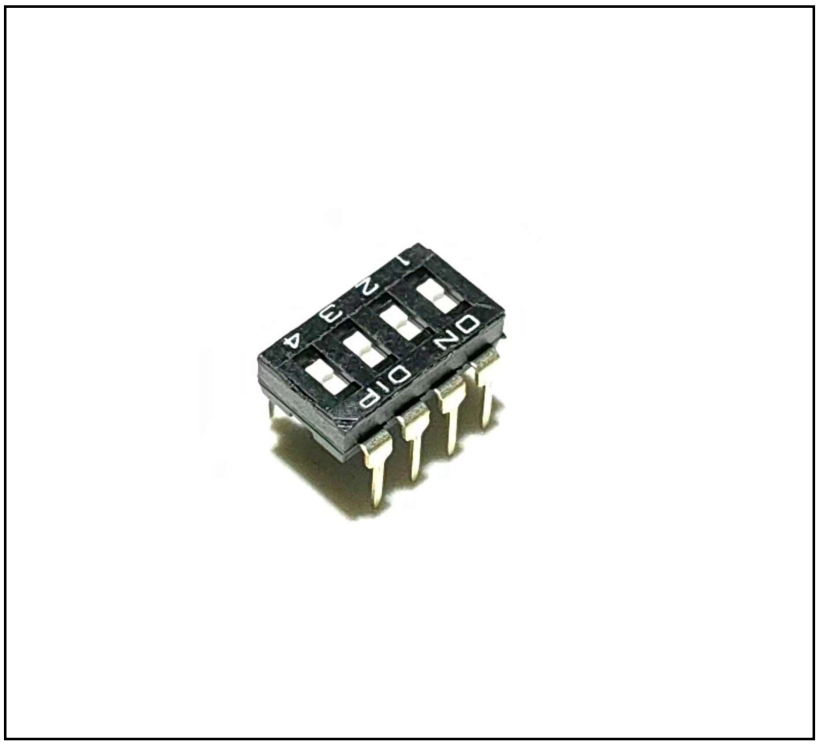
Features

- Low profile for space saving
- Gold contact provides high reliability
- Top tape type for washing process

RS PRO DIP & SIP Switches

RS Stock No.: 0241268



RS PRO is the own brand of RS. The RS PRO Seal of Approval is your assurance of professional quality, a guarantee that every part is rigorously tested, inspected, and audited against demanding standards. Making RS PRO the Smart Choice for our customers.

Product Description

This low profile through hole mounting profile IKD DIP switch is designed for reliable operation with positive detent action.

Applications include:

- *Industrial control*
- *Automatic machines control*
- *Telecommunication*

Electrical Specification

Contact Current Rating (Non-Switching)	100mA, 50V DC
Contact Current Rating (Switching)	25mA , 24V DC
Voltage Rating	24V DC
Contact Configuration	SPST
Number of Positions	4
Actuator Type	Slide
Mounting Type	Through Hole
Package Style	DIP

Operation Environment Specification

Operating Temperature Range	-40°C ~ 85°C
Minimum Operating Temperature	-40°C
Maximum Operating Temperature	85°C
Storage Temperature Range	-40°C ~ 85°C
Mechanical Life	2000 Cycles

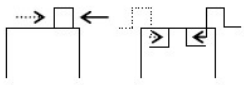
Material Specification

Cover Material	Thermoplastic PPS UL 94V-0 Moulded Black
Actuator Material	Thermoplastic Nylon UL 94V-0 Moulded White
Contact Material	Alloy-Copper Gold Plated
Terminal Material	Brass Gold Plated
Base Material	Thermoplastic PPS UL 94V-0 Moulded Black

Electrical Performance

Visual Examination	By visual examination check without any out pressure & testing REQUIREMENTS: There shall be no defects that affect the serviceability of the product
Contact Resistance	To be measured between the two terminals associated with each switch pole Measurements shall be made with a 1kHz shall current contact resistance meter REQUIREMENTS: 50mΩ max. (initial)
Insulation Resistance	500V DC, 1 minute ± 5 sec REQUIREMENTS: 100MΩ min
Dielectric Withstanding Voltage	500V AC (50Hz or 60 Hz) shall be applied between all the adjacent terminals and between the terminal and the frame for 1 minute REQUIREMENTS: There shall be no breakdown or flashover
Capacitance	1 MHz ± 10 kHz REQUIREMENTS: 5 pF max.

Mechanical Performance

Operation Force	Applied in the direction of operation  ON→OFF OFF→ON REQUIREMENTS: 1000gf max
Stop Strength	A static load of 1 kgf is applied in the operating direction and pulling direction operated for a period of 15 seconds REQUIREMENTS: There shall be no sign of damage mechanically
Soldering Heat Resistance	Duration of Solder Immersion: 5±1 sec Frequency of Solder Process: 2 time max. (PCB is 1.6 mm in thickness.)
Vibration	Shall be vibrated in accordance with Method 201A of MIL-STD-202F Frequency: 10-55-10 Hz 1 min/cycle Direction: 3 vertical directions including the direction of operation Test Time: 2 hours each direction
Shock	Shall be shocked in accordance with Method 213B condition A of MIL-STD-202F Acceleration: 50G Action Time : 11 ± 1 m sec Testing Direction: 6 sides

	Test cycle : 3 times in each direction
Solderability	Soldering Temperature:245±3℃ Lead-Free solder: M705E JIS Z 3282 Class A (Tin 96.5%, Silver 3%, Copper 0.5%) Flux: 5-10 seconds Duration of solder Immersion:5±1 sec. REQUIREMENTS: No anti-soldering and the coverage of dipping into solder must more than 75% of request

Working temperature

Resistance Low Temperature	Following testing the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made Temperature : -40℃±2℃ Time: 96 hours
Resistance High Temperature	Following testing the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made Temperature : +85℃±2℃ Time: 96 hours REQUIREMENTS: Contact Resistance: 100mΩ max.
Resistance Humidity	Following testing the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made Temperature : 40℃±2℃ Relative Humidity :90~95% Time: 96 hours REQUIREMENTS: Contact Resistance: 100mΩ max. Insulation Resistance: 10MΩ min.

Durability

Operation Life	Measurements shall be made following the test set forth below: 25 mA, 24V DC resistive load Rate of Operation: 15~20 cycles/minute Cycle of Operation: 2,000 cycles. REQUIREMENTS: Contact Resistance:100mΩ max.(final-after test)