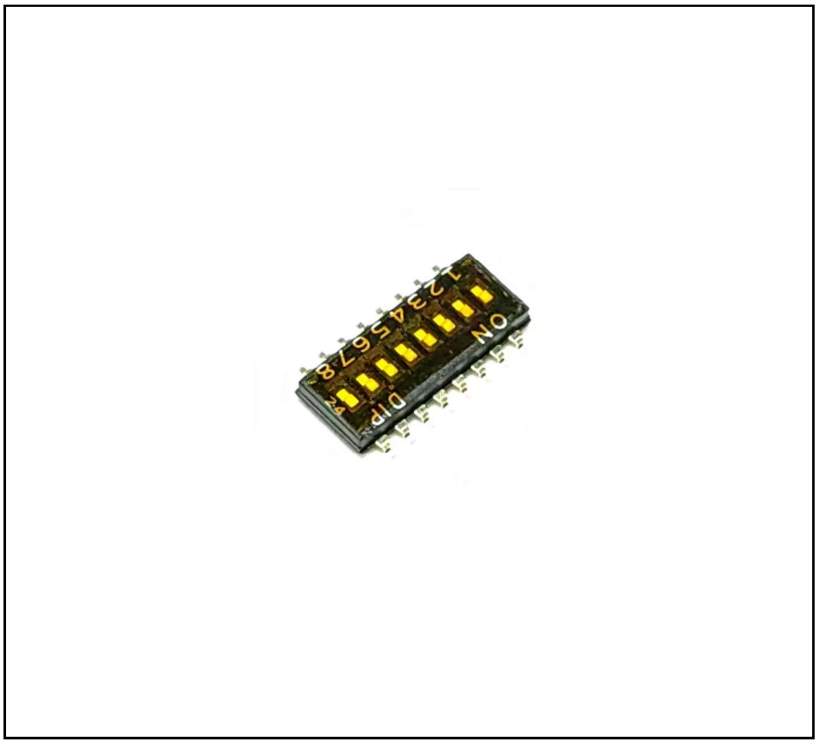
Features

- Low profile for space saving, 1.6mm height
- Gold contact provides high reliability

RS PRO Dip & SIP Switches

RS Stock No.: 0241259



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.

DIP & SIP Switches

Product Description

The low profile IKD DIP switch is designed for reliable operation with positive detent action. Available in 2 and 8 poles.

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	24V DC
Number of Positions	8
Actuator Type	Slide
Mounting Type	Surface Mount
Contact Configuration	SPST
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	1000 Cycles

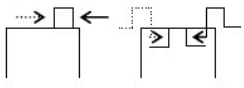
Material Specification

Cover Material	Thermoplastic Nylon FR52 UL94V-0 Moulded Black
Actuator Material	Thermoplastic Nylon LCP UL94V-0 Moulded White
Contact Material	Alloy-Copper Gold Plated At Contact Area
Terminal Material	Brass, Gold Plated 0.075um min
Base Material	Thermoplastic Nylon FR52 UL94V-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: 100mΩ max. (initial)
Insulation Resistance	500V DC, 1 minute ± 5 sec REQUIREMENTS: 100MΩ min
Dielectric withstanding Voltage	300V 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 We suggest to operate the actuator at 30°~120° from Z direction and the force is 300gf max. and 10sec. max REQUIREMENTS: 500gf 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 Soldering Process 1 times max. (PCB is 1.6mm 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 should 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 should 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 should 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:2Ω max. Insulation Resistance:10MΩ min.

Durability

Operation Life	Measurements shall be made following the test set below 25 mA, 24V DC resistive load Rate of Operation: 15~20 cycles/minute Cycle of Operation: 1,000 cycles. REQUIREMENTS: Contact Resistance:2Ω max (final-after test)