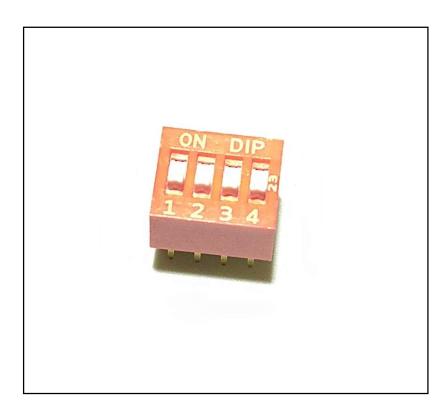


## **Features**

- Low profile for space saving
- Gold contact provides high reliability
- Slide actuator
- Both ON/OFF position applicable for soldering process

## **RS PRO DIP & SIP Switches**

RS Stock No.: 0241262



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**

This low 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
Actuator Type	Slide
Contact Configuration	SPST
Number of Positions	4
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 PBT UL 94V-0 Moulded Red
Actuator Material	Thermoplastic PBT UL 94V0 Moulded White
Contact Material	Alloy Copper Gold Plated
Terminal Material	Brass, Gold Plated
Base Material	Thermoplastic PA UL 94V-0 Moulded Black

# **DIP & SIP Switches**



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	500 V 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**

	Applied in the direction of operation.
Operation Force	ON→OFF OFF→ON
	REQUIREMENTS: 1000 gf max (9.8N Max)
Stop Strength	A static load of 1kgf (9.8N) is applied in the operating direction and pulling direction operated for a period of 15 seconds.  A static load of 5 kgf (49N) to apply on stem top position for a period of 15 seconds.  REQUIREMENTS :There shall be no sign of damage mechanically There shall be no sign of electrical function out of order or damage.
Soldering Heat Resistance	Soldering Temperature 260°C±5°C for 5±1 sec (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

# DIP & SIP Switches



	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
	NDS(R) V Soldering Temperature:245± 3°C
	Lead Free solder M705E JIS Z 3282 Class A
	(Tin 96.5%, Silver 3% Copper 0.5%)
Solderability	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 the testing the sample should be left in normal temperature and humidity conditions for an hour before Temperature: -40°C±3°C Time: 96 hours
Resistance High Temperature	Following the testing the sample should be left in normal temperature and humidity conditions for an hour before Temperature: +85°C±2°C Time: 96 hours REQUIREMENTS: Contact Resistance: 100mΩ max
Resistance Humidity	Following the testing the sample should be left in normal temperature and humidity conditions for an hour before Temperature: $40^{\circ}\text{C} \pm 2^{\circ}\text{C}$ Relative Humidity: $90^{\circ}95\%$ Time: $96$ hours REQUIREMENTS: Contact Resistance: $100\text{m}\Omega$ max Insulation Resistance: $10M\Omega$ min

### **Durability**

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