

Features

- Low profile for space saving
- Gold contact provides high reliability
- Type of Actuation: Rotating

RS PRO DIP & SIP Switches

RS Stock No.: 0241266



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 through hole DIP switch is designed for reliable operation with positive detent action.

Applications include:

- Building & home automation
- White goods
- Electronic instrument

Electrical Specification

Contact Current Rating (Non-Switching)	400mA, 24V DC
Contact Current Rating (Switching)	150mA , 24V DC
Voltage Rating	24V DC
Contact Configuration	SPST
Number of Positions	10
Actuator Type	Rotary
Mounting Type	Through Hole
Package Style	DIP

Operation Environment Specification

Operating Temperature Range :	-60°C ~ 125°C
Minimum Operating Temperature	-60°C
Maximum Operating Temperature	125℃
Storage Temperature Range	-60°C ~ 125°C

Material Specification

Base Material	Thermoplastic Nylon UL94V – 0 Moulded Black
PCB Contact Material	FR-4 Gold Plated
Actuator Material	Thermoplastic Nylon UL94V – 0 Moulded Gray
O Ring Material	Silicone
Spring Material	Stainless Steel
Cover Material	Thermoplastic Nylon UL94V – 0 Moulded White
Terminal Material	Brass Gold Plated



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: 80mΩ max. (initial)
Inculation Projectors of	250V DC, 1 minute ± 5 seconds
Insulation Resistance	REQUIREMENTS: 100MΩ min.
Dielectric withstanding Voltage	250V 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.
	REQUIREMENTS: 400gf·cm Max
Stop Strength	A static load of 1 kgfis applied in the vertical 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 \pm 1 sec Frequency of Soldering Process: 2 times max (PCB is 1.6mm in thickness.) REQUIREMENTS: Contact Resistance: 200m Ω max. Insulation Resistance :10M Ω min.



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.
	Shall be shocked in accordance with Method 213B
Shock	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°C
	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 85% 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 : -60°C±2°C
	Time: 96 hours
	REQUIREMENTS: Contact Resistance: 200mΩ max.
	Insulation Resistance: $10M\Omega$ min.
Resistance High Temperature	Following testing the sample shall be left in normal
	temperature and humidity conditions for an hour before
	measurements are made
	Temperature: +125°C±2°C
	Time: 96hours
Resistance Humidity	Following testing the sample shall be left in normal
	temperature and humidity conditions for an hour before
	measurements are made
	Temperature : 40°C±2°C
	Relative Humidity :90~95%
	Time: 504 hours

Durability

Operation Life	Measurements shall be made following the test set forth
	below:
	100mA, 5V DC resistive load
	Rate of Operation: 1 cycles/ minute
	Step of Operation: 10,000 Steps.
	REQUIREMENTS: Contact Resistance: $500m\Omega$ max.