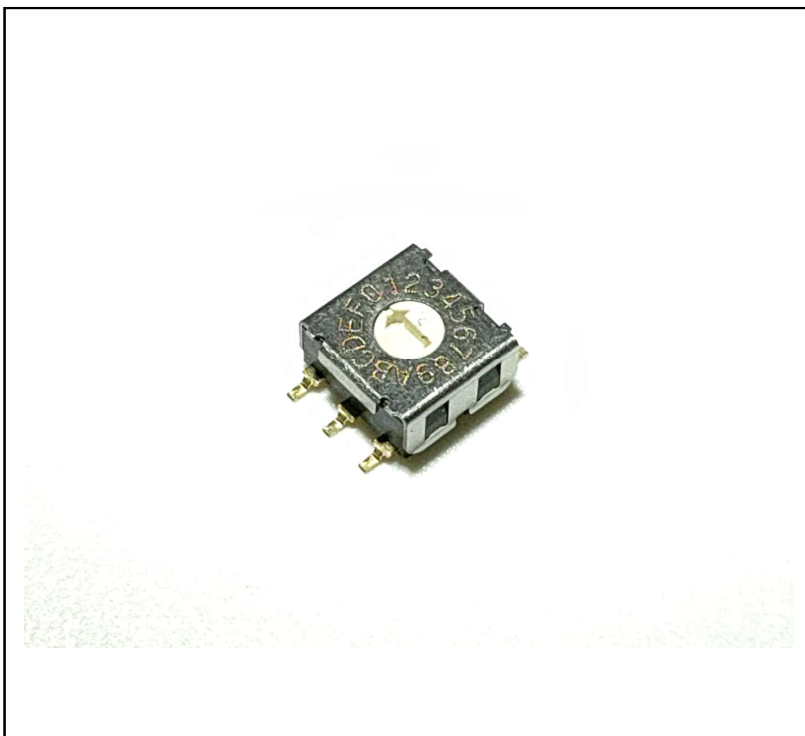


Features

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

RS PRO DIP & SIP Switches

RS Stock No.: 0241265



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 rotary surface mount 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)	100mA, 10µA min, 30V DC
Contact Current Rating (Switching)	25mA , 24V DC
Voltage Rating	24V DC
Contact Configuration	SPST
Number of Positions	16
Actuator Type	Rotary
Mounting Type	Surface Mount
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

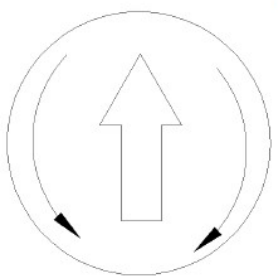
Material Specification

Cover Material	Stainless Steel
Seal Material	Silicone Rubber Moulded Red
Actuator Material	Thermoplastic LCP Moulded White
Spring Plate Material	Stainless Steel
Contact Material	Alloy Copped Gold Plated
Base Material	Thermoplastic LCP Moulded Black
Terminal Material	Phosphor Bronze 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: 100mΩ max. (initial)
Insulation Resistance	100V DC, 1 minute ± 5 sec. 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.

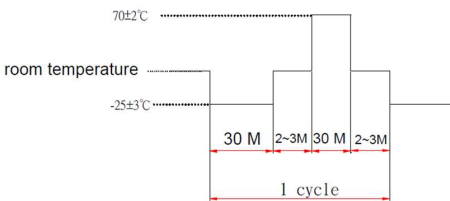
Mechanical Performance

Operation Force	Applied in the direction of operation.  200gf·cm Max (1.96N·cm Max)
Stop Strength	A static load of 1 kgf is 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±1 sec. Frequency of Soldering Process: 2 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

DIP & SIP Switches

	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	RJH Soldering Temperature: $245 \pm 3^\circ\text{C}$ 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 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: $-40^\circ\text{C} \pm 2^\circ\text{C}$ Time: 240 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: $+85^\circ\text{C} \pm 2^\circ\text{C}$ Time: 240 hours REQUIREMENTS: Contact Resistance: 200mΩ max.
Resistance Humidity	Following testing the sample shall be left in normal temperature and humidity conditions for an hour before measurements are made Temperature: $85^\circ\text{C} \pm 2^\circ\text{C}$ Relative Humidity : 90~95% Time: 240 hours REQUIREMENTS: Contact Resistance: 200mΩ max. Insulation Resistance: 10MΩ min.
Change of temperature	After 5 cycles of following conditions, the switch shall be allowed to stand under normal room temperature and humidity conditions for 1 hr and measurements shall be made within 1 hr after that. Water drops shall be removed. <div style="text-align: center;">  <p>70±2°C</p> <p>room temperature</p> <p>-25±3°C</p> <p>30 M 2~3 M 30 M 2~3 M</p> <p>1 cycle</p> </div> REQUIREMENTS: No abnormalities shall be recognized in

DIP & SIP Switches

	appearance and construction.
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Durability

Operation Life	Measurements shall be made following the test set forth below: 100 mA, 5V DC resistive load Rate of Operation: 1 cycles/ minute Step of Operation: 20000 Steps. REQUIREMENTS: Contact Resistance: 200mΩ max. final-after test
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