

Standard specification

DIP SWITCH(HALF PITCH) 1.27 mm

1.Ratings:

1.1 Mechanical Life:1000 cycles minimum

1.2 Contact Rating:

100mA at 50 Vdc Non-switching; 25 mA at 24 Vdc,10 mA at 50 Vdc Switching.

1.3 Contact Resistance:

50 milliohms maximum (initial)100 mohms

100 milliohms maximum (after test)100 mohms

1.4 Insulation Resistance:

Minimum at 100 Vdc between adjacent closed contacts and also across open switch contacts。

initially: 200 megaohms

After Life: 100 megaohms

1.5 Dielectric Strength:

300 Vac,RMS,minimum voltage measured between adjacent closed contacts and also across open switch contacts。

1.6 Switch Capacitance: 5pF at 1 megahertz.

1.7 Operating Temperature:-30°C to +85°C.

1.8 Storage Temperature:-30°C to +85°C.

1.9 Test condition:

The standard test Shall be 5~35°C temperature and 45~85% relative humidity 860~1060 Hpa atmospheric pressure unless otherwise specified . In case of any question happen, retest condition shall specify by temperature $20 \pm 2^{\circ}\text{C}$, $65 \pm 5\%RH$ and 860~1060 Hpa.

2.Materials and Finishes:

2.1 Terminals contact:

Copper alloy, gold plated 3μ” over nickel

2.2 Terminals: Copper alloy, gold plated 1μ” over nickel

2.3 Base : UL94V0, BLACK

2.4 Cover : UL94V0, BLACK

2.5 Actuator : UL94V0, WHITE

3. Processing:

3.1 Switch Operation and Taping

3.1.1 Use tweezers or ball point pen for operation.

3.1.2 Flux cleaning should be done without removing the tape

3.1.3 If the tape is removed, it adhered less than before when it is placed back on, possibly causing flux inflow.

3.1.4 Sealed switches withstand aqueous, detergent and isopropyl alcohol washing.

4. ELECTRICAL CHARACTERISTIC:

ITEM	TEST DESCRIPTION	TEST CONDITIONS	SPECIFICATION
4.1	Contact Resistance	To be measure with AC 1 KHz \pm 200Hz (Max 20mV, Max 50mA) or 10mA, 5V DC.	Max 50 M Ω
4.2	Insulation Resistance	TO be measured with an insulation measuring device of 500V DC between all the Terminals and between The terminals and the frame for 1 minute \pm 5 seconds.	Min 1,000 M Ω
4.3	Dielectric Breakdown voltage	AC 500V (50-60HZ , 2mA current) being applied between all the adjacent terminals and between the terminal and frame for 1 minute	No breakdown insulation
4.4	Switch Capacitance	TO be measured with frequency 1MHz \pm 10KHz Applied between adjacent terminal and circuit	Max 5PF

5. MECHANICAL CHARACTERISTIC:

ITEM	TEST DESCRIPTION	TEST CONDITIONS	SPECIFICATION
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5.1	Operation Force	Applied in the direction of operation	1,000gf Max
5.2	Terminal Strength	Measurement in made with a static load applied to the foot of the control unit in the operating direction. A static force of 500gf being applied in one direction on the tip of the terminal for 5~10seconds. One time each terminal.	No bending or deflection experienced. The terminal may be bent, but shall not break or damage the insulation material.
5.3	Operation Strength	A load of 1Kgf is applied in the operating direction and pulling direction of the control unit for 15 seconds.	Electrical characteristic of the (3) above shall be assured

6.RELIABILITY

ITEM	TEST DESCRIPTION	TEST CONDITIONS	SPECIFICATION
6.1	Cold Resistance	Switch for testing being kept in the conditions at -40 ± 2 °C in temperature for 250 hours, and in a normal ambient condition for one hour, then to be measured within one hour. (Drops of water being taken away)	Contact resistance (3.1) Max 100 mΩ Insulation resistance (3.2) Min 100 mΩ Dielectric breakdown voltage: AC 500V
6.2	Dry Heat Resistance JIS-C5022	Switch for testing being kept in the conditions at 85 ± 2 °C in temperature for 250 hours, and in a normal ambient condition for one hour, then to be measured within one hour.	1 minute no breakdown insulation Operating force (4.1) $\pm 30\%$ gf BEFORE TEST Max. There shall be

			no defects in appearance or in the mechanical functions.
6.3	Humidity Resistance	Switch for testing being kept in the conditions at $40\pm 2^{\circ}\text{C}$ in temperature and 90~95% RH for 250 hours, and in a normal ambient condition for one hour, then measured within one hour.	Contact resistance (3.1) Max 100 mΩ Insulation resistance (3.2) Min 100 mΩ Dielectric breakdown voltage: AC 500V 1 minute no breakdown insulation Operating force (4.1) $\pm 30\%$ gf before test. There should be no defects in appearance or in the mechanical functions.
6.4	Vibration Test	The range of vibration: 10~55Hz Total width of vibration: 1.5mm The proportion of vibration: 10~55~10(Hz) approx. 1 minute The variation of the number of vibration: Logarithmic or approx. Straight line	Contact resistance (3.1) Max 50 mΩ Insulation resistance (3.2) Min 100 mΩ Dielectric breakdown voltage (3.3) AC 500V 1 minute no breakdown insulation

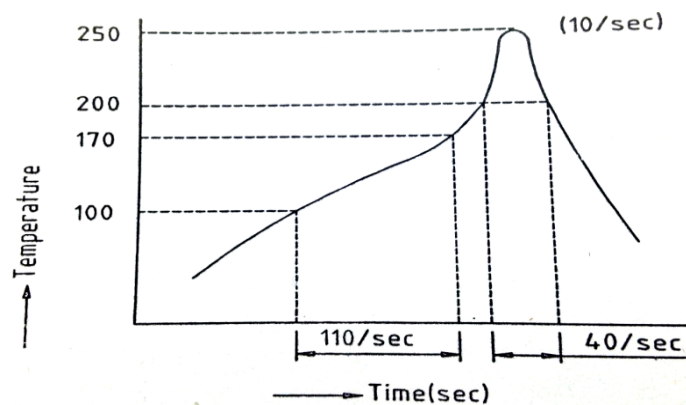
		<p>The directions:3 vertical directions including operation direction</p> <p>Amplitude:0.03inch~0.06inch</p> <p>Duration:2 hours each (Total 6 hours)</p>	<p>Operating force (4.1) \pm 30%gf before test As per individual specifications No apparent effect on physical appearance or mechanical functions.</p>
6.5	Salt-Spray Test	<p>The sample is allowed to stand the test chamber controlled to 35 ± 2 °C ,in temperature and 5 ± 1 % (Weight ratio) salt-water concentration for 24 ± 1 hour and is subjected to test. Then,salt deposits attached to the sample are washed away with water.</p>	<p>Shall be free from functionally harmful rust.</p>
6.6	Thermal Shock	<p>After 5 cycle testing under the following conditions,the sample is allowed to stand under normal temperature and humidity conditions for 2 hour Then measuring ,water drops should be eliminated.</p>	<p>Contact resistance (1) Max 100mΩ Insulation resistance (1.2) Min 100mΩ Dielectric breakdown voltage:AC 500V 1 minute no breakdown insulation Operating force (2.1) \pm 30%GF BEFORE TEST There shall be no defects in appearance or in the</p>

			mechanical functions
6.7	Solder Ability	Soldering temperature: $245 \pm 5 \text{ }^\circ\text{C}$ Immersing time: 3 ± 0.5 second	More than 75% of the part immersed can be covered with solder.

(1) Reflow soldering:

Device: In-line or Batch system

Apply reflow soldering only once



(2) When soldering two or more terminals to the common land, use solder resist to Solder them independently

7.DURABILITY

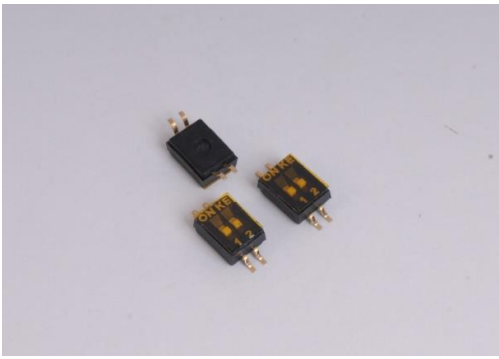
ITEM	TEST DESCRIPTION	TEST CONDITIONS	SPECIFICATION
7.1	Operation Life With No Load	2,000 cycle operation at a rate of 15~20 cycle/minute	Contact resistance Max 100 mΩ Insulation resistance
7.2	Operation Life With Load	DC 24V 25mA 1,000 cycle operation at a rate of 15~20 cycle/minute	Min 1,000 mΩ with DC 250V Dielectric breakdown voltage: AC 250V 1 minute no breakdown insulation Operating force : 1,000gf Max. There shall be no

			defects in appearance or in the mechanical functions.
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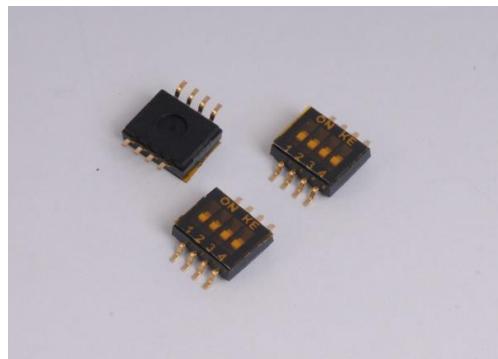
8 Preservation condition

Guarantee quality under condition of $25 \pm 5^{\circ}\text{C}$,65%RH,preservation time>1 year,validity 6 months can get the best result.

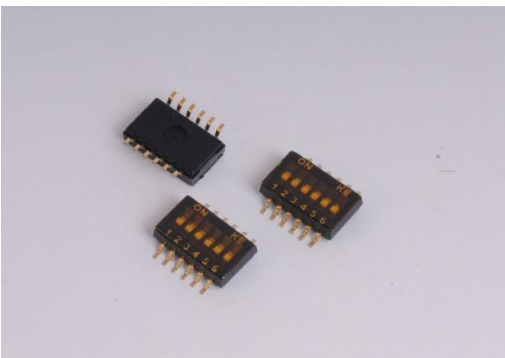
1.27 DIP switch



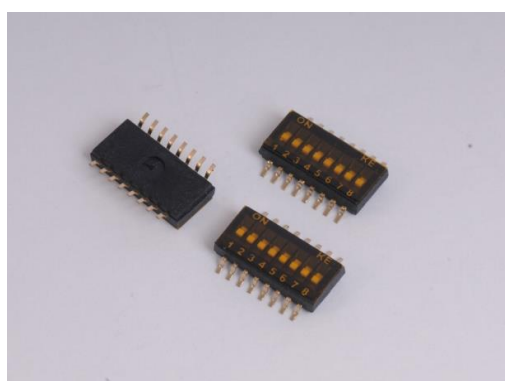
1.27 DIP switch 2-bit patch



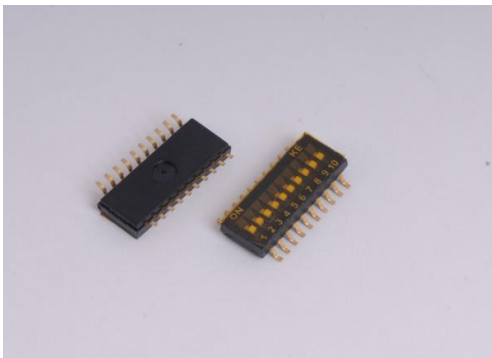
1.27 DIP switch 4-bit patch



1.27 DIP switch 6-bit patch



1.27 DIP switch 8-bit patch



1.27 DIP switch 10-bit patch

Standard specification

DIP SWITCH(HALF PITCH) 2.54mm

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2.Materials and Finishes:

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4.3	Dielectric Breakdown voltage	AC 500V(50-60HZ, 2mA current) being applied between all the adjacent terminals and between the terminal and frame for 1 minute	No breakdown insulation
4.4	Switch Capacitance	TO be measured with frequency 1MHz \pm 10KHz Applied between adjacent terminal and circuit	Max 5PF

5. MECHANICAL CHARACTERISTIC:

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5.3	Operation Strength	A load of 1Kgf is applied in the operating direction and pulling direction of the control unit for 15 seconds.	Electrical characteristic of the (3) above shall be assured

6.RELIABILITY

ITEM	TEST DESCRIPTION	TEST CONDITIONS	SPECIFICATION
6.1	Cold Resistance	Switch for testing being kept in the conditions at -40 ± 2 °C in temperature for 250 hours, and in a normal ambient condition for one hour, then to be measured within one hour. (Drops of water being taken away)	Contact resistance (3.1) Max 100 mΩ Insulation resistance (3.2) Min 100 mΩ Dielectric breakdown voltage: AC 500V
6.2	Dry Heat Resistance JIS-C5022	Switch for testing being kept in the conditions at 85 ± 2 °C in temperature for 250 hours, and in a normal ambient condition for one hour, then to be measured within one hour.	1 minute no breakdown insulation Operating force (4.1) $\pm 30\%$ gf BEFORE TEST Max. There shall be

			no defects in appearance or in the mechanical functions.
6.3	Humidity Resistance	Switch for testing being kept in the conditions at $40\pm 2^{\circ}\text{C}$ in temperature and 90~95% RH for 250 hours, and in a normal ambient condition for one hour, then measured within one hour.	Contact resistance (3.1) Max 100 mΩ Insulation resistance (3.2) Min 100 mΩ Dielectric breakdown voltage: AC 500V 1 minute no breakdown insulation Operating force (4.1) $\pm 30\%$ gf before test. There should be no defects in appearance or in the mechanical functions.
6.4	Vibration Test	The range of vibration: 10~55Hz Total width of vibration: 1.5mm The proportion of vibration: 10~55~10(Hz) approx.1 minute The variation of the number of vibration: Logarithmic or approx.	Contact resistance (3.1) Max 50 mΩ Insulation resistance (3.2) Min 100 mΩ Dielectric breakdown voltage (3.3) AC 500V 1 minute no breakdown

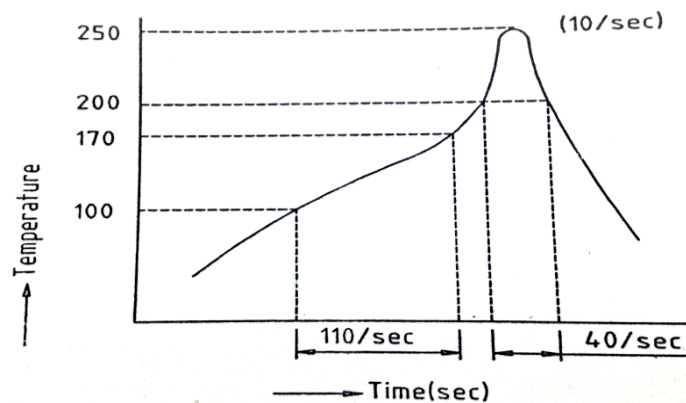
		<p style="text-align: center;">Straight line</p> <p>The directions:3 vertical directions including operation direction</p> <p>Amplitude:0.03inch~0.06inch</p> <p>Duration:2 hours each (Total 6 hours)</p>	<p>insulation</p> <p>Operating force (4.1) $\pm 30\%$gf before test As per individual specifications No apparent effect on physical appearance or mechanical functions。</p>
6.5	Salt-Spray Test	<p>The sample is allowed to stand the test chamber controlled to 35 ± 2 °C ,in temperature and 5 ± 1 % (Weight ratio) salt-water concentration for 24 ± 1 hour and is subjected to test. Then,salt deposits attached to the sample are washed away with water.</p>	<p>Shall be free from functionally harmful rust.</p>
6.6	Thermal Shock	<p>After 5 cycle testing under the following conditions,the sample is allowed to stand under normal temperature and humidity conditions for 2 hour Then measuring ,water drops should be eliminated.</p>	<p>Contact resistance (1) Max 100mΩ</p> <p>Insulation resistance (1.2) Min 100mΩ</p> <p>Dielectric breakdown voltage:AC 500V</p> <p>1 minute no breakdown insulation</p> <p>Operating force (2.1) $\pm 30\%$GF</p> <p>BEFORE TEST</p> <p>There shall be no</p>

			defects in appearance or in the mechanical functions
6.7	Solder Ability	Soldering temperature: $245 \pm 5 \text{ }^\circ\text{C}$ Immersing time: 3 ± 0.5 second	More than 75% of the part immersed can be covered with solder.

(1) Reflow soldering:

Device: In-line or Batch system

Apply reflow soldering only once



(2) When soldering two or more terminals to the common land, use solder resist to Solder them independently

7.DURABILITY

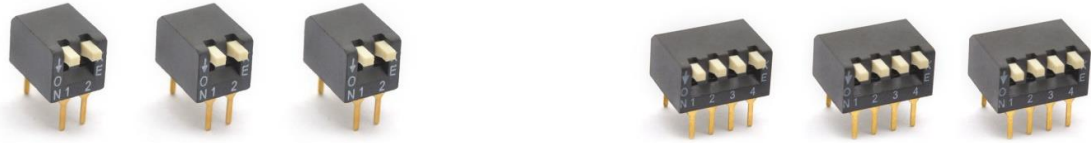
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7.2	Operation Life With Load	DC 24V 25mA 1,000 cycle operation at a rate of 15~20 cycle/minute 1000 次	Min 1,000 mΩ with DC 250V Dielectric breakdown voltage: AC 250V 1 minute no breakdown

			insulation Operating force : 1,000gf Max. There shall be no defects in appearance or in the mechanical functions.
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8 Preservation condition

Guarantee quality under condition of 25 ± 5 °C ,65%RH,preservation time>1 year,validity 6 months can get the best result.

2.54 PV DIP switch



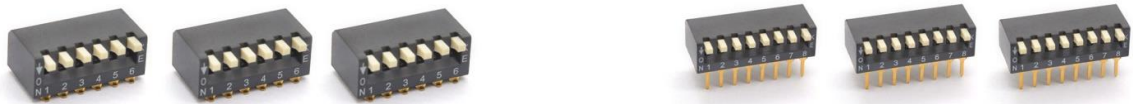
2.54 PV DIP 2-bit switch

2.54 PV DIP 4-bit switch



2.54 PV DIP 5-bit switch

2.54 PV DIP 6-bit switch



2.54 PV SMD 6-bit switch

2.54 PV DIP 8-bit switch



2.54 Three state DIP switch



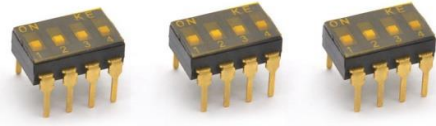
2.54 Three state DIP 8-bit switch

2.54 Three state DIP 8-bit switch

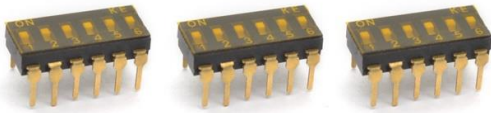
2.54 DIP switch



2.54 DIP switch



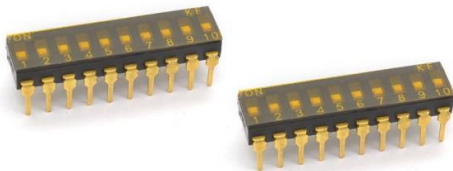
DSIC04THGET



DSIC06THGET



DSIC08THGET



DSIC10THGET

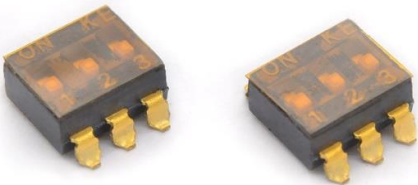
2.54 DIP switch



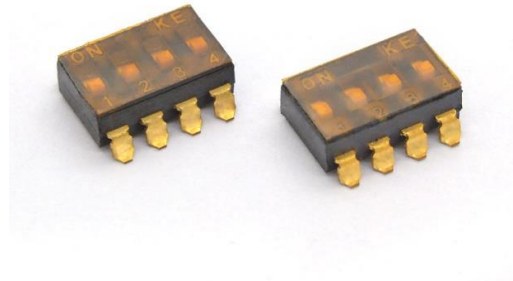
2.54 DIP switch flat push patch



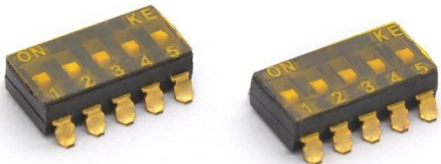
2.54 DIP switch 2-bit flat push patch



2.54 DIP switch 3-bit flat push patch



2.54 DIP switch 4-bit flat push patch

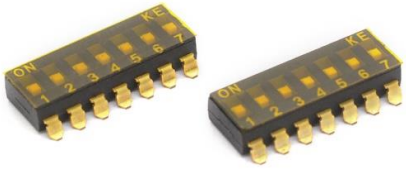


2.54 DIP switch 5-bit flat push patch

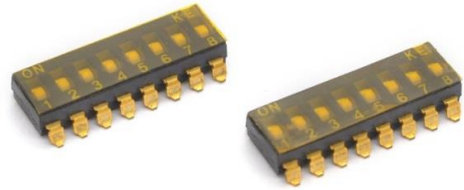


2.54 DIP switch 6-bit flat push patch

2.54 DIP switch



2.54 DIP switch 7-bit flat push patch



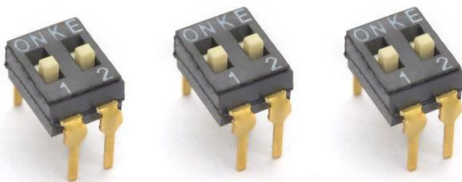
2.54 DIP switch 8-bit flat push patch



2.54 DIP switch 9-bit flat push patch



2.54 DIP switch high push-in

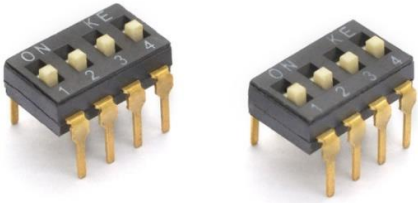


2.54 DIP switch 2-bit high push-in

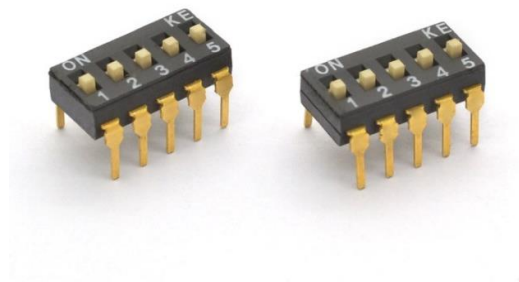


2.54 DIP switch 3-bit high push-in

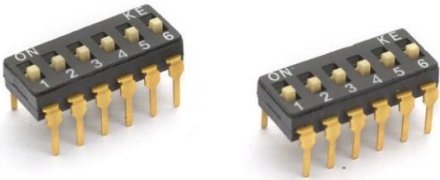
2.54 DIP switch



2.54 DIP switch 4-bit high push-in



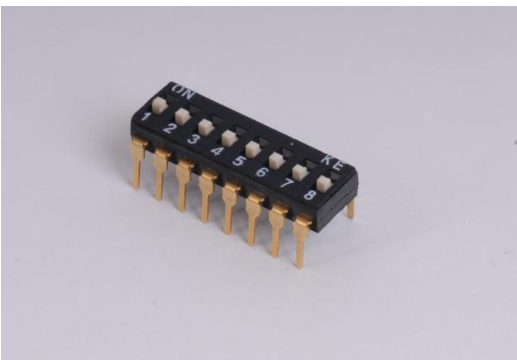
2.54 DIP switch 5-bit high push-in



2.54 DIP switch 6-bit high push-in



2.54 DIP switch 7-bit high push-in

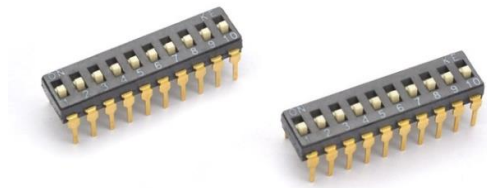


2.54 DIP switch 8-bit high push-in



2.54 DIP switch 9-bit high push-in

2.54 DIP switch



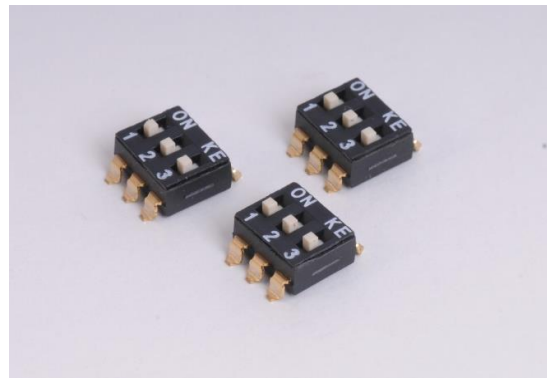
2.54 DIP switch 10-bit high push-in



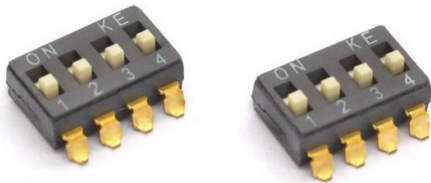
DSIC01LSGET



DSIC02LSGET



DSIC03LSGET



DSIC04LSGET

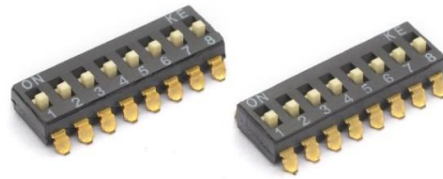


DSIC05LSGET

2.54 DIP switch



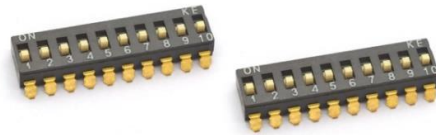
DSIC06LSGET



DSIC08LSGET



DSIC09LSGET



DSIC10LSGETT



DSIC12LSGET