

TACT SWITCH SPECIFICATION

1.GENERAL

- 1-1 Item No. : KS01-□□□-□
1-2 Switch rating : 100mA 35VDC
1-3 Operation temperature range : - 20℃-- 85℃
1-4 Preservative temperature range : -25℃ -- 80℃
1-5 Appearance and dimensions : See outside drawing page
1-6 Standard conditions : Unless otherwise specified, the test and measurements shall be carried out as follows:

Ambient temperature : 5--35℃

Relative humidity : 45--85% RH

Air pressure : 86--106 kPa (860--1060mbar)

However, if doubt arises on the decision based on the measured values under the above- mentioned conditions, the following conditions shall be employed.

Ambient temperature : $20 \pm 2^\circ \text{C}$

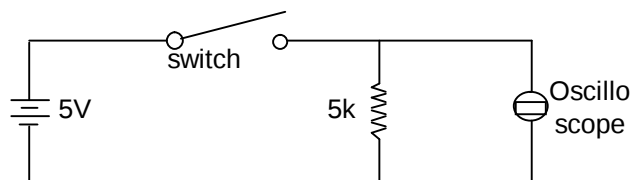
Relative humidity : 65 ± 5 % RH

Air pressure : 86--106 kPa (860--1060mbar)

2.PERFORMANCE

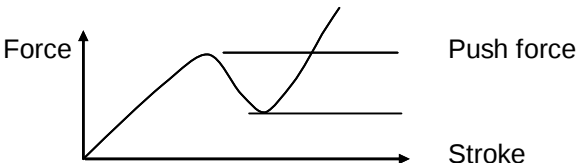
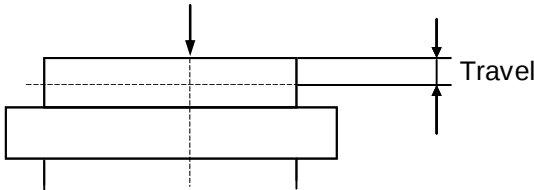
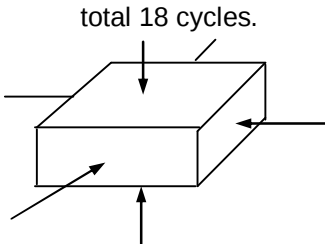
2-1 Electrical characteristics

NO	ITEM	TEST CONDITIONS	PERFORMANCE
2.1.1	Contact resistance	Applying a static load twice the actuating force to the center of the stem, measurements shall be made with a 1KHz small-current contact resistance meter.	30mΩ max.
2.1.2	Insulation resistance	Measurements shall be made following application of DC 250V potential across terminals and across terminals and frame for one minute.	100MΩ min.
2.1.3	Dielectric withstanding voltage	AC 250V(50Hz or 60Hz) shall be applied across terminals and across terminals and frame for one minute.	There shall be no breakdown.
2.1.4	Bounce	Lightly striking the center of the stem at a rate encountered in normal use (3 to 4 operations per sec) bounce shall be tested at "ON" and "OFF".	10m sec max.



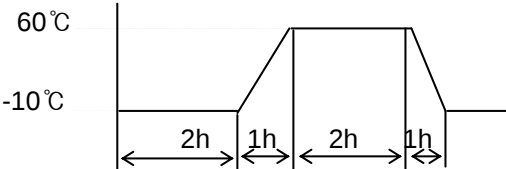
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B	2006.09.01			張大色			張大色			
A	2005.10.29			張大色						
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2-2 Mechanical characteristics

NO	ITEM	TEST CONDITIONS	PERFORMANCE
2.2.1	Operation force	Push by recommended operating condition 	operating force: V:130±50 gf M:250±50 gf
2.2.2	Travel	Push by recommended operating condition 	0.7± 0.20mm
2.2.3	Stop strength	Astatic load of 1Kgf shall be applied in the direction of stem operation for a period of 60 seconds.	No damage (Electrical and mechanical)
2.2.4	Vibration test	1)Amplitude : 1.5mm 2)Sweep rate :10-55-10Hz for 1 minute. 3)Sweep method : Logarithmic frequency sweep rate. 4)Vibration direction : X.Y.Z(3 directions) 5)Time : Each direction 2 hours (Total 6 hours)	No 2.1 and 2.2.1 to 2.2.2 shall be satisfied.
2.2.5	Impact shock test	1)Acceleration : 80G 2)Cycles of test : 3 cycles each in 6 directions, for a total 18 cycles. 	No 2.1 and 2.2.1 to 2.2.2 shall be satisfied.
2.2.6	Wave Soldering heat test	Soldering area : t/2 of P.W.B thickness (P.W.B : t = 1.6) Soldering temperature : 255±5℃ Soldering time : 5±1 sec.	No damage (Electrical and mechanical)

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NO	ITEM	TEST CONDITIONS	PERFORMANCE
2.3.1	Cold test	1) Temperature : $-30\pm 2^{\circ}\text{C}$ 2) Duration of test : 96 hours 3) Take off a drop water 4) Standard condition after test : 1 hour	Contact resistance : $200\text{m}\Omega$ max. No 2.1.2 to 2.1.4 and 2.2.1 to 2.2.2 shall be satisfied.
2.3.2	Heat test	1) Temperature : $80\pm 2^{\circ}\text{C}$ 2) Duration of test : 96 hours 3) Standard conditions after test : 1 hour	Contact resistance : $200\text{m}\Omega$ max. No 2.1.2 to 2.1.4 and 2.2.1 to 2.2.2 shall be satisfied.
2.3.3	Temperature cycle	1) Test cycles : 5 cycles 2) Standard conditions after test : 1 hour 3) 1 cycle : 	Contact resistance : $200\text{m}\Omega$ max. No 2.1.2 to 2.1.4 and 2.2.1 to 2.2.2 shall be satisfied.
2.3.4	Humidity test	1) Temperature : $60\pm 2^{\circ}\text{C}$ 2) Relative humidity : 90--95% 3) Duration of test : 96 hours 4) Take off a drop water 5) Standard conditions after test : 1 hour	Contact resistance : $200\text{m}\Omega$ max. No 2.1.2 to 2.1.4 and 2.2.1 to 2.2.2 shall be satisfied.
2.3.5	Operating life test	1) Operation speed : 40-60cycles/min 2) Push force : Maximum value of operation force 3) Cycles of operation : V : 100,000 cycles M : 30,000 cycles	Contact resistance : $250\text{m}\Omega$ max. Bounce : 20m sec max. Actuating force: $\pm 30\%$ initial force No 2.1.2 to 2.1.3 and 2.2.2 shall be satisfied.

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