

SPECIFICATION	PAGE
TACT SWITCH	1 / 4

1. GENERAL MATTERS

- 1.1 Application: This specification is applied to low current circuit tactile switch for electronic equipment.
- 1.2 Operating temperature range : $-20 \sim 70$ °C, $45 \sim 85$ °RH
- 1.3 Storage temperature range : $-30 \sim 80 \, ^{\circ} \text{C}$. However, 96 hours maximum for continuous storage over a range $-20 \sim -30 \, ^{\circ} \text{C}$ and a range $70 \sim 80 \, ^{\circ} \text{C}$.
- 1.4 Test conditions : The standard test conditions shall be 5 \sim 35 $^{\circ}$ C in temperature, 45 \sim 85% RH and 860 \sim 1060mbar in atmospheric pressure.

Should any doubt arise in judgement, tests shall be conducted at $20\pm2^{\circ}$ C, 65±5% RH and 860 ~ 1060mbar.

2. RATED VOLTAGE AND CURRENT. DC 12V 50^{mA}

3. ELECTRICAL PERFORMANCE

	PROPERTY	TEST CONDITIONS	PERFORMANCE
3.1	Contact arrangement		* 1 pole, 1 throw.
3.2	Contact resistance	Measured at DC 5V 10 ^{mA} or by ohmmeter allowing a small current at 1KHz with a load of 150% of the actuating force.	*As per individual manufactured drawing.
3.3	Insulation resistance	DC 100V is applied between terminals and between terminals and earth for 1 minute ±5 seconds.	* greater than 100 MΩ.
3.4	Dielectric strength	AC 250V (50 \sim 60Hz) is applied between terminals and between terminals and earth for 1 minute.	* No insulation defect shall be observed.
3.5	Bounce	Measured by lightly striking the center of the button stem at a rate of 3 operations/sec···	* less than 10 msec.

						APPD	CHKD	DSGN	TITLE	
	i I I									
	† 								DOCUMENT NO.	WT 0158
ZONE	SYMB	DATE	APPD	CHKD	DSGD					WI 0136

SPECIFICATION	PAGE
TACT SWITCH	2 / 4

4. MECHANICAL PERFOMANCE

	PROPERTY	TEST CONDITIONS	PERFORMANCE
4.1	Actuating force	A gradually increasing load is applied to the center of the button stem.	* As per individual manufactured drawing.
4.2	Return force	After actuating, the load is gradually decreased until the stem returns to its free position.	* 160gf, 260gf: greater than 50gf. * 100gf, 130gf: greater than 30gf.
4.3	Stop strength	A static force of 3 Kgf shall be applied to the direction of operation for 3 seconds.	* Shall be free from mechanical and electrical abnormalities.
4.4	Stem withdrawal force	A static load of 500gf is applied to the direction of pulling for 3 seconds.	* Shall be free from mechanical and electrical degradation.
4.5	Travel		* As per individual manufactured drawing.
4.6	Arrangement of action		* Tactile feed-back.

5. DURABILITY

	PROPERTY	TEST CONDITIONS	PERFORMANCE
5.1		The test in conducted according to the below. (1) DC12V 50mA resistive load (2) Rate of operation: 120 cycle/min (3) Actuating force: 150% of actuating force (4) Operating cycle: As per individual manufactured drawing.	* Contact resistance: 200mΩ max. * Bounce: 20m sec max. * Actuating force: within ± 30% of the initial value.

	<u> </u>	! ! !				APPD	CHKD	DSGN	TITLE	
		! ! !							DOCUMENT NO.	WT 0158
ZONE	SYMB	DATE	APPD	CHKD	DSGD					*** 0100

SPECIFICATION	PAGE
TACT SWITCH	3 / 4

6. WEATHER PROOF

	PROPERTY	TEST CONDITIONS	PERFORMANCE
6.1	Cold heat proof	After testing at -30℃ for 96hours. the sample is allowed to stand under normal temperature and humidity conditions for 1hour and measurement is performed within 1hour after that. Water drops should be wiped off.	* The requirement in item 3 and 4 shall be satisfied.
6.2	Dry heat proof	After testing at 85°C for 96hours. the sample is allowed to stand under normal temperature for 1hour and measurement is performed within 1 hour after that.	* The requirement in item 3 and 4 shall be satisfied.
6.3	Damp heat proof	After testing at 60±2°C and 90 ~ 95% in relative humidity for 96hours, the sample is allowed to stand under normal temperature and humidity conditions for 1hour and measurement is performed within 1hour after that. Water drops should be wiped off.	* Insulation resistance: 10™ minimum. * Dielectric strength: same as item 3.4. * Contact resistance: same as item 3.2.
6.4	Thermal cycling	After the test conducted under 5 cycles the sample is allowed to stand under normal temperature and humidity conditions for 1 hour, and the measurement is performed within 1 hour.	* The requirement in item 3 and 4 shall be met.

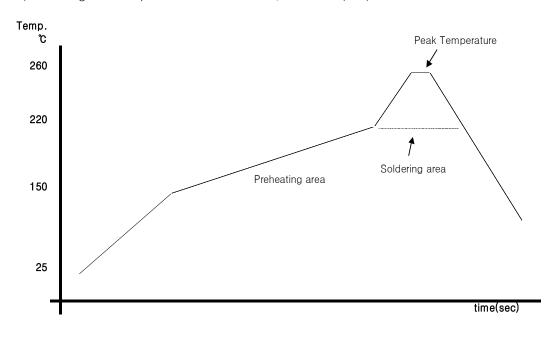
						APPD	CHKD	DSGN	TITLE	
									DOCUMENT NO.	WT 0158
ZONE	SYMB	DATE	APPD	CHKD	DSGD					W1 0136

SPECIFICATION	PAGE
TACT SWITCH	4 / 4

7. REFLOW SOLDERING

7.1 Reflow soldering conditions

- 1) Preheat ----- 150°C ~ 200°C, 120 ±20 (sec)
- 2) Peak temperature --- 260°C max. 10 (sec)
- 3) Soldering area temperature ----- 217 $^{\circ}$ C, 90 \sim 120 (sec)



< Temperature profile >

8. Manual soldering

- 8.2 Soldering time ----- 5(sec)

	! !					APPD	CHKD	DSGN	TITLE	
									DOCUMENT NO.	WT 0158
ZONE	SYMB	DATE	APPD	CHKD	DSGD					VV 1 0130

X-ON Electronics

Largest Supplier of Electrical and Electronic Components

Click to view similar products for Tactile Switches category:

Click to view products by NAMAE manufacturer:

Other Similar products are found below:

5GTH92001 5GTH9202242 ADTSA62NV ADTSA62RV B3F-3123 1977177-8 1977266-1 ADTSA63NV ADTSM21NSVTR

ADTSM25RVTR ADTSM32NVTR ADTSMW64RV FSMRA4JHA04 GS4.70F300QP 3ESH9R KSC241J SP DELTA LFS 3FTL600RAS

3FTL640RAS Y96K132V0FPLFS 5GSH92001 5GTH9658222 ADTSM31NVTR 2-1977120-7 TSJW-5.2-260-TR KMT011MNGJLHS

ADTSG648NV ADTSM62KSVTR ADTSM648NV 95C06E3RAT 3ATH9Q FSM4JSMLXTR FSM4JSMXL FSMRA8JHA04 HARS0073

Y97HS12A5RAFP Y97BT23B2HAFP Y33R411N9FPLFT Y31C01402FPLFS PTS645SK50SMTR92 ADTSM32NVB KMS233GPWTLFG

Y78B42324FP Y33R21116FPLFT Y31B43131FPLFG Y78B64124FP Y71243251FP Y33R31119FPLFT Y97HS12A5TAFP

PTS638SK25SMTR2LFS Y97LT25BADBFP