

CIRCUIT DIAGRAM



NOTE

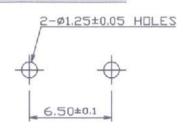
1. OPERATING FORCE : 500+50/-100gf

2. TRAVEL :0.25 +0.2/-0.1 mm

3. CONTACT RESISTANCE : 100mg Max

4. GENERAL TOLERANCE : ± 0.3

P.C.B DIMENSION



No.	+	PART NAM	E	Q'TY	MATERIA	L	SIZE	TREAT.	REMARKS
<u>A</u>	_		H	3RB ANGLE PROJECTION	UNIT n/n	SCALE	MODEL TACTS	S35H43B5	500
A A				ret	Diala	DEZIBLED	DWG.NAME		
A I	DATE	NOTE	SIGN	- [1		\T	D∀G.ND.		1

1. RATINGS 12V DC, 50mA

2. MECHANICAL SPECIFICATIONS

2.1 Actuating Force 500+50/-100gf 2.2 Return Force Greater than 50gf

2.3 Stop Strength Greater than 3kgf (for 3 seconds)

2.4 Travel $0.25 \begin{array}{c} +0.2 \\ -0.1 \end{array}$ mm $$ 2.5 Arrangement of Action $$ Tactile feed - back

2.5 Arrangement of Action Tactile feed - back
2.6 Operating Temperature Rang -30°C ~ 80°C, 45 ~ 85%RH

2.7 Storage Temperature Range -35°C ~ 85°C However, 96 hours maximum for continuous storage

over a range -20°C ~ 30°C and range 70°C ~ 80°C

2.8 Stem withdrawal Force Greater than 500gf (pull vertically to the opposite direction of

stem operation)

3. ELECTRICAL SPECIFICATIONS

3.1 Contact Arrangement single pole, single throw

3.2 Contact Resistance Less than 100mΩ when tested by the voltameter method at 5V DC

10mA, or by an ohmmeter allowing a small current at 1000Hz

(measurements to the made with a 100, 130, 160±30gf, 250±50gf load

applied vertically at the center of switch)

3.3 Insulation Resistance Greater than 100MΩ (100V DC insulation resistance meter)

3.4 Dielectric Strength Capable of withstanding 250V AC, for 1 (one) min.

3.5 Bounce Less than 10msec (the key shall be struck lightly vertically at its center

at a uniform cycling rate of 3 operations per second)

4. ENDURANCE

4.1 Operating Life Following 50,000 cycles of operation cycling rate (2 operations

per sec.) at a force of depression not exceeding 160gf with a resistive load supplying 12V DC, 50mA, the following requirements shall be

satisfied:

4.1.1 Actuating Force Plus or minus 50% of the initial force

4.1.2 Contact Resistance Less than $100m\Omega$ 4.1.3 Bounce Less than $20m\Omega$

4.2 Moisture Resistance Following exposure to a 60°C ±2°C, 90 ~ 95%RH, environment in a test

chamber for 96 hours and then, out of the chamber, to room condition of normal temperature and humidity for 30 minutes, the requirements

set forth below shall be met.

4.2.1 Insulation ResistanceGreater than $10M\Omega$ 4.2.2 Dielectric StrengthSame as Item 3.44.2.3 Contact ResistanceSame as Item 3.2

4.3 Heat Resistance Following exposure to an 85°C environment in a test chamber for 96

hours and then, out of the chamber, to room condition of normal temperature and humidity for 30 minutes, the requirements in Items

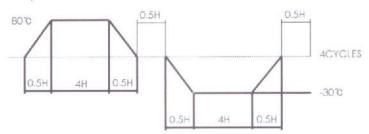
2 and 3 shall be satisfied.

DATE		DESIGNED	CHECKED	APPROYED	PAGE
S/W TYPE	TACT S/W	(X)	ande	V/	. /
MODEL NO.	TACTS35H43B500	X		CHA	/
DOCUMENT NO.		9 1	/ /	/ /	1 2

4.4 Resistance to Low Temperature

Following exposure to a -40°C environment in a test chamber, to room condition of normal temperature and humidity for 30 minutes, the requirements in Items 2 and 3 shall be met.

4.5 Thermal Cycling



Following 5 cycles of a thermal cycling test, on cycle of which is prescribed in the diagram above, the requirements in Items 2 and

3 shall be met.

4.6 Shock Resistance Following application of an impact shock of 30G in accordance

with the method 205, MIL - STD - 202, the requirements in Items 2

and 3 shall be met.

4.7 Vibration Resistance Following the test conducted according to the method 201,

MIL - STD -202, the switch under test shall conform to the requirements in Items 2 and 3 without any sign of defect both in appearance and

actuation.

5. AUTOMATIC SOLDERING CONDITIONS (in case he automatic flow soldering is to be used)

5.1 Soldering Temperature 230°C max

5.2 Soldering Time Continuous dipping duration shall not exceed 5 second.

5.3 Permissible Soldering Times 2 time max

(twice soldering would be dipped after the temperature goes down

to a normal temperature)

5.4 Preheat Temperature 100°C max

(circumferential temperature of the printed writing board)

5.5 Preheat Time 45 seconds max

5.6 Flux Streaming Flux streaming shall be controlled so that it shall not swell beyond

the printed writing board where components are installed.

5.7 Other Precautions

(1) Flux shall not be applied to switch terminals and the part mounting surface of the P.W. board before soldering.

(2) Do not wash to switch after soldering.

DATE		DESIGNED	CHECKED	APPROVED	PAGE
S/W TYPE	TACT S/W	(IR	link	VXI	/
MODEL NO.	TACTS43H35B500	/ 10	- Lance	10 74	2/
DOCUMENT NO.		7/	1 1	1 1	12