

TS001 SERIES LED TOUCH SENSOR SWITCH



Feature -

- water proof IP67 sealed
- capacitive touch key, panel mount
- wire assembly service
- full color LED illuminated available
- recommend operating voltage 2.0~5.5VDC

Application -

- water purifiers
- kitchen appliances
- vending machines and switches
- used in the polluted environment

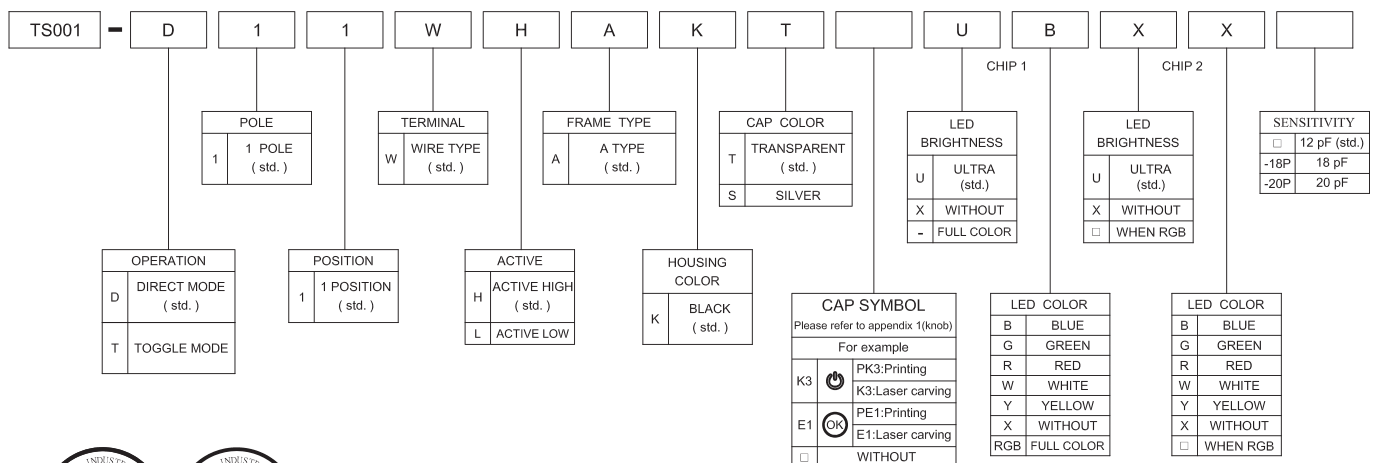
SPECIFICATIONS

SWITCH SPECIFICATIONS						
POLE - POSITION			One-Channel			
CIRCUIT FEATURE			Capacitive analog signal			
OPERATING TEMPERATURE RANGE			-20°C ~ 70°C			
SEALING			IP67			
ELECTRICAL CHARACTERISTICS						
Symbol	Parameter	Conditions	MIN.	TYP.	MAX.	Units
V _{CC}	Operating voltage		2.0	3.0	5.5	V
F	System oscillator	V _{CC} = 3V		16		KHz
F _{SEN}	Sensor oscillator	V _{CC} =3V, Output no load		1M		Hz
V _{IH}	Input ports	V _{CC} =3V, Output no load		1.5	3.0	uA
V _{IL}	Input ports	Input low voltage	0		0.2	V
I _{OP}	Operating current	Input high voltage	0.8		1.0	V
I _{OL}	Output port sink current	V _{CC} =3V, VOL=0.6V		8		mA
I _{OH}	Output port source current	V _{CC} =3V, VOH=2.4V		-4		mA
T _R	Output response time	V _{CC} =3V			220	mS
R _{PH}	Input pin pull-high resistor	V _{CC} =3V		35K		Ω
R _{PL}	Input pin pull-low resistor	V _{CC} =3V		28K		Ω

LED SPECIFICATIONS					
ATTENTION (+)○ (-)○ LEDs are Electrostatic Sensitive devices		Unit	Value / LED Color		
			Ultra Green	Ultra Yellow	Ultra Red
FORWARD CURRENT	I _f	mA	20	20	20
REVERSE VOLTAGE	V _r	V	5.0	5.0	5.0
REVERSE CURRENT	I _r	μA	10	10	10
FORWARD VOLTAGE@20mA	V _f	V	2.1-2.5	2.0-2.5	2.0-2.5
LUMINOUS INTENSITY@20mA	I _v	mcd	60	120	150

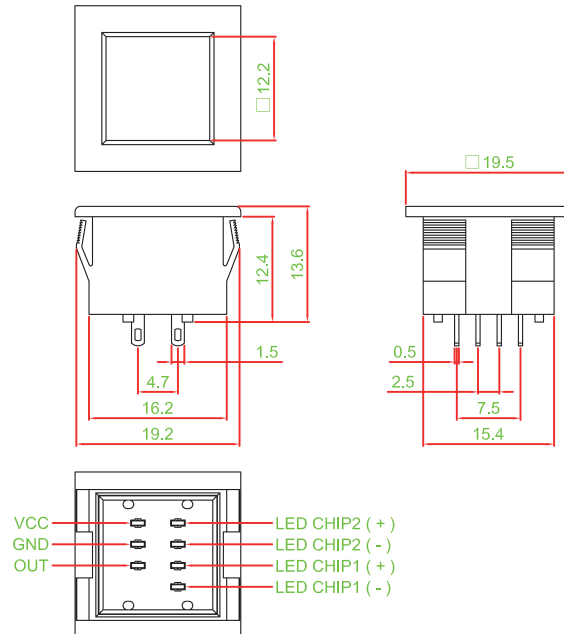
Physical and electrical information of LED will be provided upon customer's request on switches.

HOW TO ORDER



► DIMENSION & FRAME TYPE

TS001 - D11WHAKT□□□□

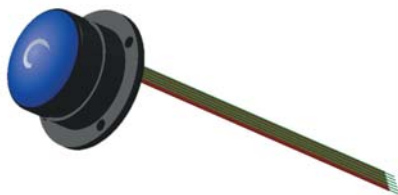


► PANEL CUT OUT

	PANEL THICK	W
	0.75 ~ 1.25	17.6 ~ 17.8
	1.25 ~ 2.0	17.8 ~ 18.0
	2.0 ~ 3.0	18.0 ~ 18.2

► MATERIAL

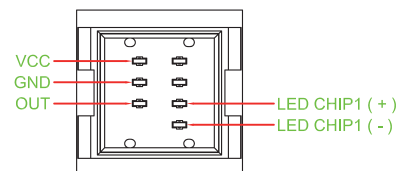
- COVER : PC
- ACTUATOR : POM
- BASE FRAME : PA + GF
- TERMINAL : BRASS SILVER PLATING



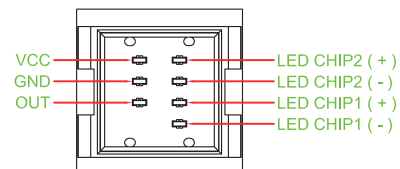
CUSTOM-MADE STYLE AVAILABLE

► SCHEMATIC

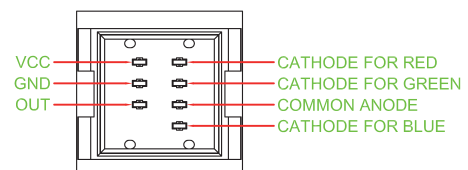
SINGLE COLOR



TWO COLOR



FULL COLOR



	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
A	0	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19
B	A	B	C	D	E	F	G	H	I	J	CH5	CH6	DSK	PIP	C-KEY	CUT	TAKE	REC	ENG	PROD
C	K	L	M	N	O	P	Q	R	S	T	REPLAY	RET1	RET2	KEY ON	AUTO TAKE					
D	U	V	W	X	Y	Z	POWER	ON OFF	ON	OFF		USER A	USER B	USER C	USER D	USER E	USER F	USER G	USER H	USER I
E	OK		Auto	Enter	Start	STOP	OPEN	CLOSE	Exit	Move	USER J								M-1	
F	SET	Reset	Light	Alarm	Menu	Next	Back	Delete	Motor	Save										
G	Up	Down	Right	Left	Test	End	Insert	Lock	Print	+/-										
H	ESC	BC	HOME	Health	D-LED 2	OC GENIE	VIDEO INPUT	clr CMOS	Green Power	Save OK										
I	B/R	Undo Cancel	T/L	F1	F2	F3	F4	F5	F6	F7										
J	F8	F9	F10	F11	F12	F13	F14	IN 1	IN 2	IN 3										
K	IN 4	IN 5	IN 6																	
L	+	-	x	÷	=	↑	→	▲	▶	▶▶										
M						↑	→	↑	⇒											
N	↑	→	▲	◀	▶	◀◀	▶▶	◀	▶											
O																				
P																				
Q	ME3	ME4	BGND 3D DVE1	BGND 3D DVE2	BUS COLOR	ME BUTTON LINK	*	INSERT	WIPE											
R	⏮	ALL		VP		COPY		RECORD MODE	↑											
S			MUTE																	
T																				
U			chair																	
V			OC			CLEAR	CROSS WIND	AMMO TEMP	BARO PRESS	AIR TEMP										
W	BORE-SIGHT	CANT	LEAD	RANGE	MRS	ZERO	TEST	UD	LR											
X	ID	Disp		GALL		BAND	SETUP	MODE	LINK	FUNC.										
Y	SHIFT					DEL														
Z				RUN	2D	3D	CH1	CH2	CH3	CH4										