



Feature -

- small size
- bi-color LED illuminated available
- long electrical life cycles

Application -

- consumer products
- computer products
- instrumentation
- communication equipments

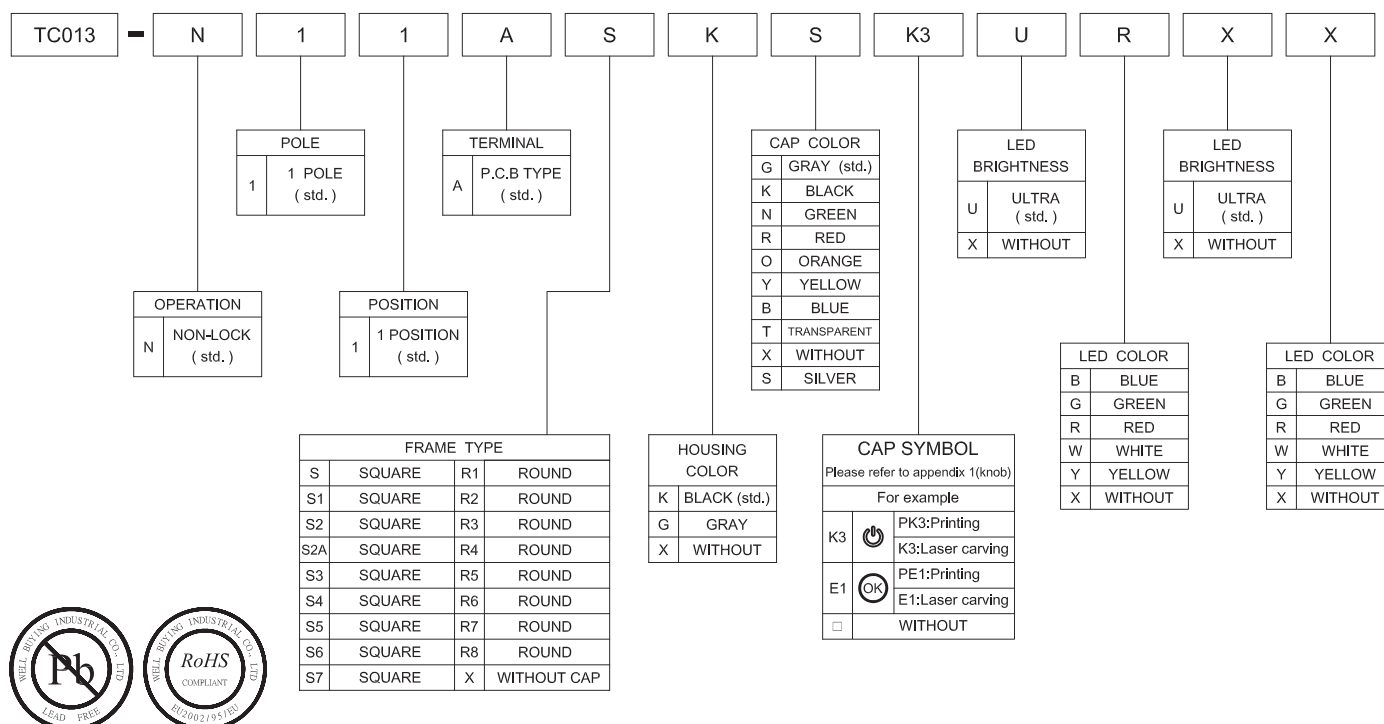
► **SPECIFICATIONS**

SWITCH SPECIFICATIONS	
POLE - POSITION	1P1T , with LED
CONTACT RATING	12 V DC , 50 mA
CONTACT RESISTANCE	100 mΩ MAX. 1.5 V DC ; 100 mA , by Method of Voltage DROP
INSULATION RESISTANCE	100 MΩ MIN. 500 V DC
DIELECTRIC STRENGTH	Breakdown is not Allowable ; 500 V AC for 1 Minute
OPERATING FORCE	180 ± 50 gf
OPERATING LIFE	500,000 cycles
OPERATING TEMPERATURE RANGE	-20°C ~ 70°C
TOTAL TRAVEL	0.2 ± 0.1 mm

LED SPECIFICATIONS								
	ATTENTION LEDs are Electrostatic Sensitive devices		Unit	Value / LED Color				
				Blue	Green	Red	White	Yellow
FORWARD CURRENT	If	mA	10	20	20	2	20	
REVERSE VOLTAGE	Vr	V	5.0	5.0	5.0	5.0	5.0	
REVERSE CURRENT	Ir	μA	10	10	10	10	10	
FORWARD VOLTAGE	Vf	V	@ 10mA 3.0~4.0	2.1~2.5	2.0~2.5	@ 2mA 2.8~4.0	2.0~2.5	
LUMINOUS INTENSITY	Iv	mcd	@ 10mA 200	800	1800	@ 2mA 12	1800	

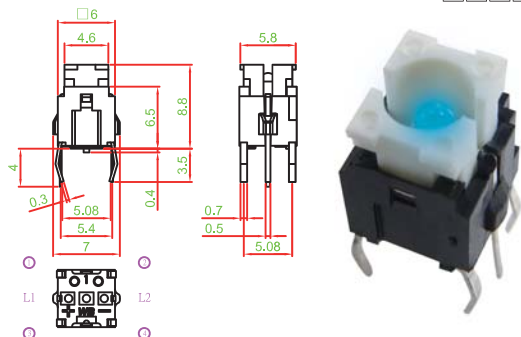
■ Physical and electrical information of LED will be provided upon customer's request on switches .

► **HOW TO ORDER**

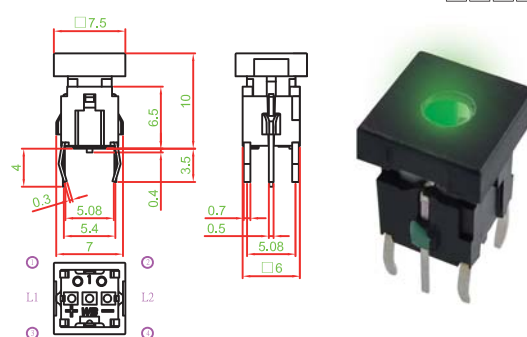


▶ FRAME TYPE OPTION

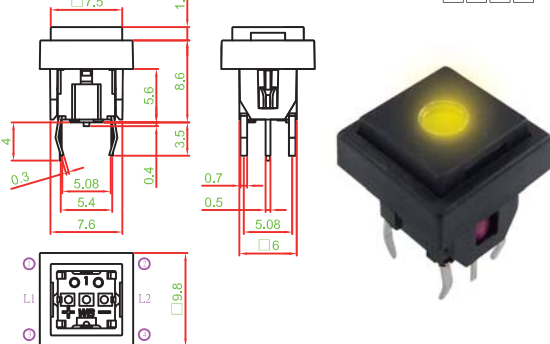
TC013-N11AXXX□□□□



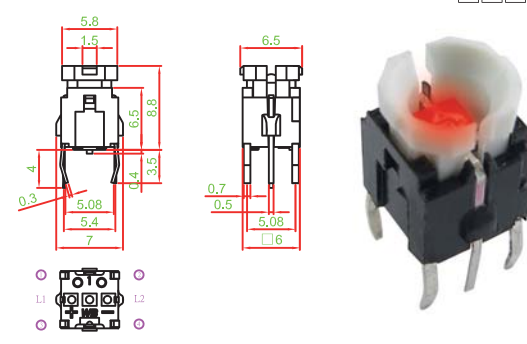
TC013-N11ASXK□□□□



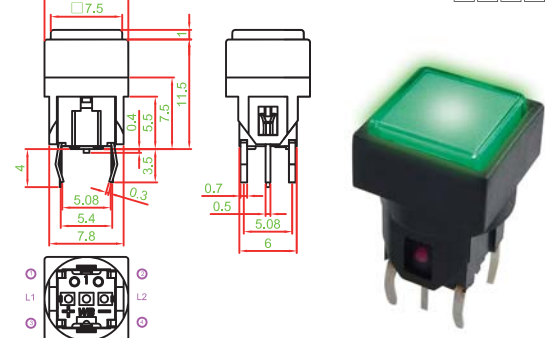
TC013-N11ASKK□□□□



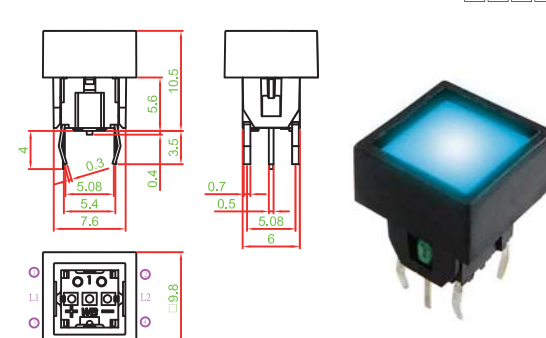
TC013-N11AS1XX□□□□



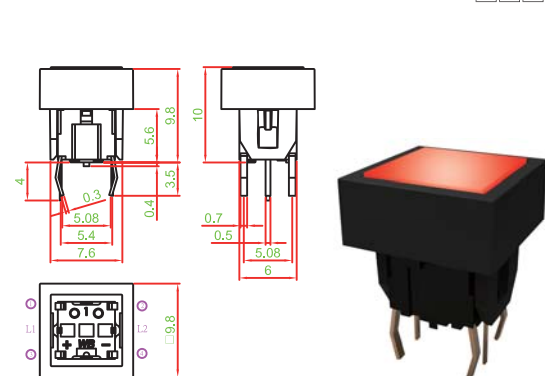
TC013-N11AS1KT□□□□



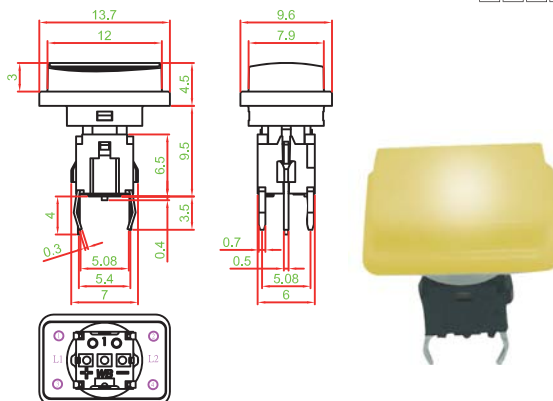
TC013-N11AS2KW□□□□



TC013-N11AS2AKW□□□□

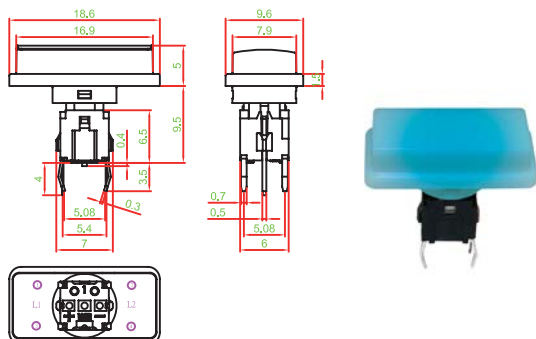


TC013-N11AS3XW□□□□

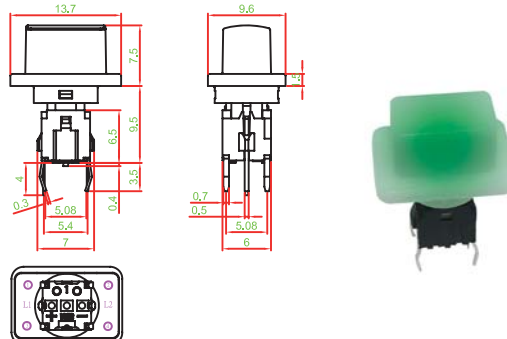


► FRAME TYPE OPTION

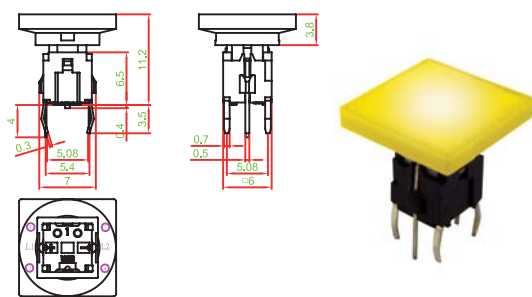
TC013-N11AS4XW□□□□



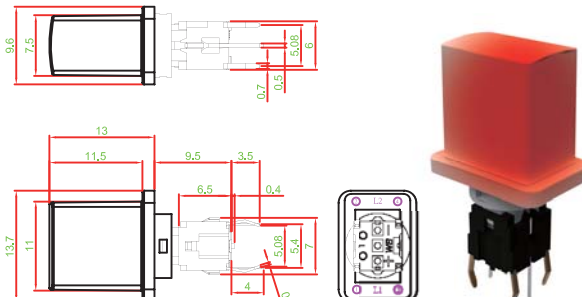
TC013-N11AS5XW□□□□



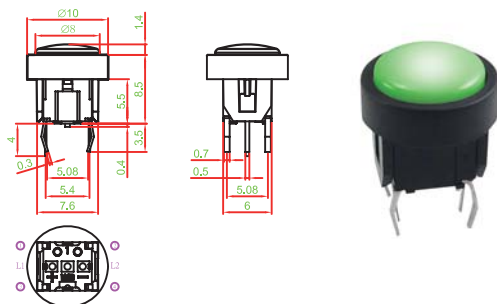
TC013-N11AS6XW□□□□



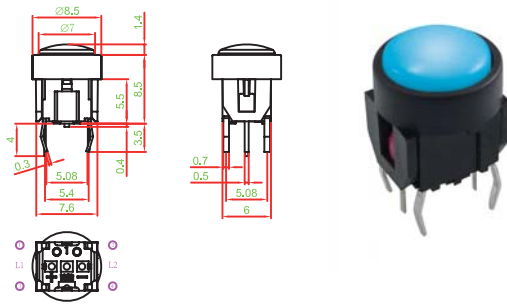
TC013-N11AS7XW□□□□



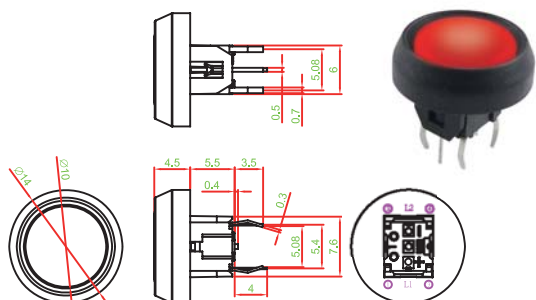
TC013-N11AR1KW□□□□



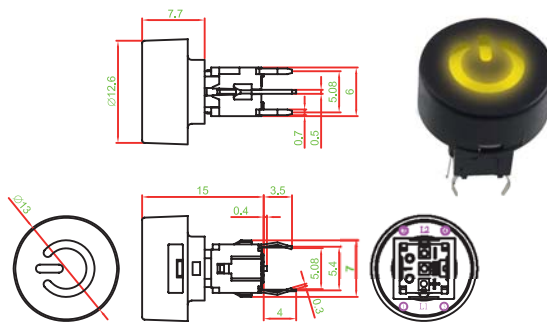
TC013-N11AR2KW□□□□



TC013-N11AR3KW□□□□

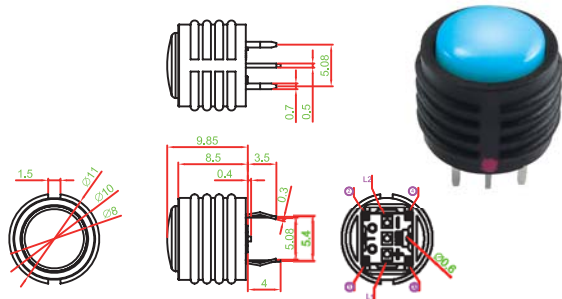


TC013-N11AR4XKK3

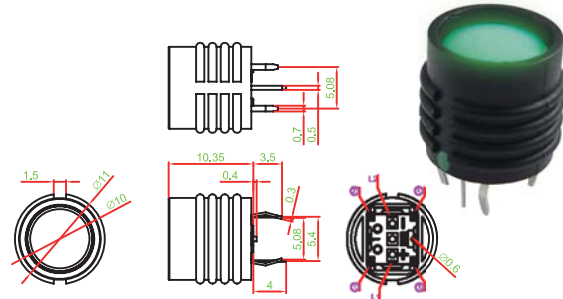
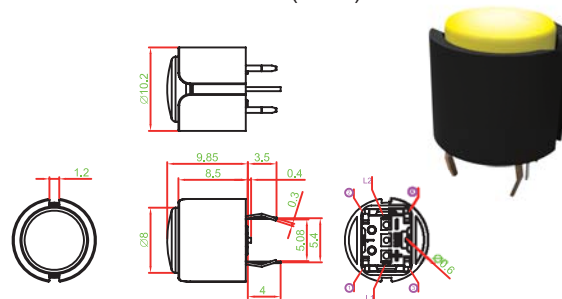
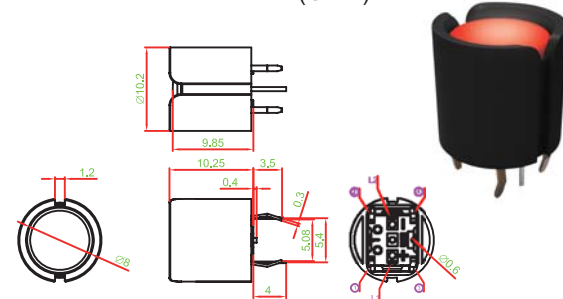


▶ FRAME TYPE OPTION

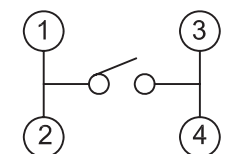
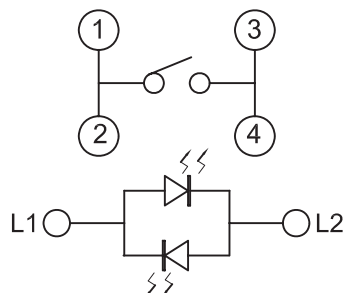
TC013-N11AR5KW□□□□



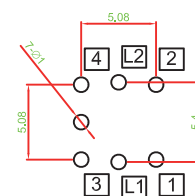
TC013-N11AR6KW□□


TC013-N11AR7KW□□□□
(ODM)

TC013-N11AR8KW□□
(ODM)


▶ CIRCUIT

LED :
SINGLE
COLOR

LED :
TWO
COLOR


▶ P.C.B LAYOUT



▶ MATERIAL

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

	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				x	✓	⊙	Config.	TIME LINE	ME1	ME2										
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		half	group	all	all	all	all	all	all	all										
U	all	all	chair	auto	radio	auto	auto	auto	auto	all										
V	all	all	OC			CLEAR	CROSS WIND	AMMO TEMP	BARO PRESS	AIR TEMP										
W	BORE-SIGHT	CANT	LEAD	RANGE	MRS	ZERO	TEST	UD	LR											
X	ID	Disp	MF	GALL	.	BAND	SETUP	MODE	LINK	FUNC.										
Y	SHIFT					DEL														
Z				RUN	2D	3D	CH1	CH2	CH3	CH4										