



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	Momentary action , SPST
CONTACT RATING	20 V DC , 1 mA
CONTACT RESISTANCE	200Ω MAX. 5 V DC ; 1 mA , by Method of Voltage DROP
INSULATION RESISTANCE	100 MΩ MIN. 100 V DC for 1 minute
DIELECTRIC STRENGTH	Breakdown is not Allowable ; 250 V AC for 1 Minute
OPERATING FORCE	60 ± 20 gf
OPERATING LIFE	500,000 cycles
OPERATING TEMPERATURE RANGE	-20°C ~ 70°C
TOTAL TRAVEL	1.3 ± 0.1 mm

LED SPECIFICATIONS								
 ATTENTION LEDs are Electrostatic Sensitive devices	(+) ○  ○ (-)	Unit	Value / LED Color					
			Blue	Green	Red	White	Yell.	
	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	
LUMINOUS INTENSITY	Iv	mcd	@ 10mA 200	800	1800	@ 2mA 12	180	

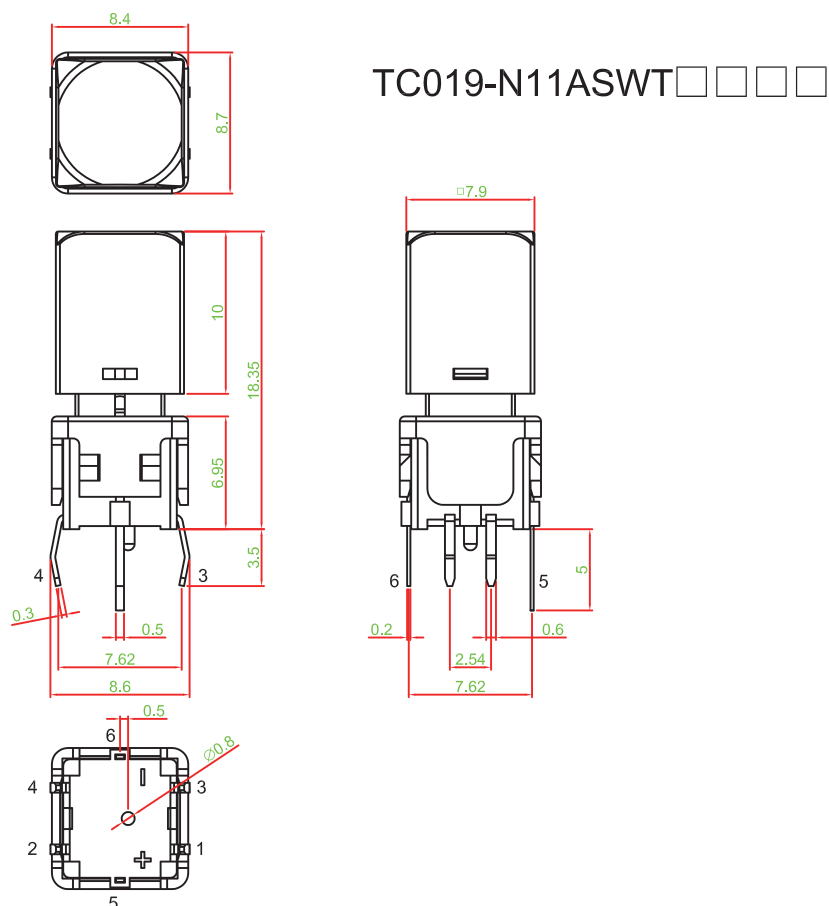
■ Physical and electrical information of LED will be provided upon customer's request on switches .

► **HOW TO ORDER**

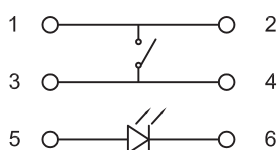
TC019	-	N	1	1	A	S	W	T		U	B	X	X
		OPERATION		POSITION		FRAME TYPE		CAP COLOR		LED BRIGHTNESS		LED BRIGHTNESS	
		N NON-LOCK (std.)		1 1 POSITION (std.)		S S TYPE		T TRANSPARENT S SILVER		U ULTRA (std.) X WITHOUT		U ULTRA (std.) X WITHOUT	
		POLE		TERMINAL		DIFFUSER PLATE COLOR		CAP SYMBOL		LED COLOR		LED COLOR	
		1 1 POLE (std.)		A P.C.B TYPE (std.)		W WHITE (std.) R RED G GREEN B BLUE Y YELLOW		Please refer to appendix 1(knob) For example K3:Printing K3:Laser carving PE1:Printing E1:Laser carving WITHOUT		B BLUE G GREEN R RED W WHITE Y YELLOW X WITHOUT		B BLUE G GREEN R RED W WHITE Y YELLOW X WITHOUT	



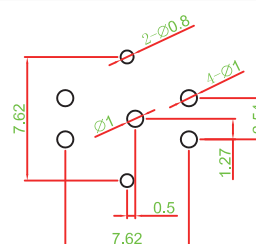
▶ DIMENSION



▶ CIRCUIT



▶ P.C.B. LAYOUT



▶ MATERIAL

- FRAME : PA + GF
- ACTUATOR : PA + GF
- TERMINAL : BRASS ; SILVER PLATING
- DIFFUSER PLATE : PC
- CAP : PC

	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						✓1	✓2			
G	Up	Down	Right	Left	Test	End	Insert	Lock	Print	+/-							IN PORT	SOS		TC
H	ESC	BC.	HOME	Health	D-LED 2	OC GENIE	VIDEO INPUT	clr CMOS	Green Power	Save OK	P1	P2	P3	P4	P5	D C	A C			TURBO
I				F1	F2	F3	F4	F5	F6	F7	SEEK	TRACK	RNA	AS/RPT	Select		SET	ON	OFF	UP
J	F8	F9	F10	F11	F12	F13	F14	IN 1	IN 2	IN 3						ON AIR		D.	M.	
K	IN 4	IN 5	IN 6												HDMI	VGA				
L	+	-	x		=							MON	ITEM	C/S	GAS	PUMP ON/OFF	PURGE	R/HR	PARL	IOD
M											FILL	LO RANGE	MID RANGE	MID	HI RANGE	GPD	EFF LEVEL			
N																				
O																				
P							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		hold	group	m1	m2	m3	m4	m5	t1	t2										
U	s1	s2	chair	undo	redo	touch	store	recall	e1	e2										
V	e3	e4	OC			CLEAR	CROSS WIND	AMMO TEMP	BARO PERSS	AIR TEMP										
W	BORE-SIGHT	CANT	LEAD	RANGE	MRS	ZERO	TEST	UD	LR											
X	ID	Disp	Mf	CALL	.	BAND	SETUP	MODE	LINK	FUNC.										
Y	SHIFT					DEL														
Z				RUN	2D	3D	CH1	CH2	CH3	CH4										