



## Datasheet

# RS PRO Sub-Miniature Pushbutton Switches

**Stock number: 175-86XX (Details as follows)**

EN



The picture above is for reference only.

### Specifications:

RATING : 5-24V / 1A DC

OPERATING LIFE : 50 MILLION CYCLE MIN.

CONTACT RESISTANCE : 1Ω MAX.

OPERATING TEMPERATURE: -20°C to 65°C.

### RS Part no.

RS Pro MPN	Packs of 1	Packs of 20
TC22M-A1-F1FB00-3CD101	1759499	1758656
TC22M-A1-F1FG00-3CD101	1759474	1758655
TC22L-A1-F1FB00-3CD101	1759580	1758666
TC22L-A1-F1FG00-3CD101	1759536	1758661
TC22L-A1-F1FB00-L3D101	1759490	1758636
TC22L-A1-F1FG00-L3D101	1759472	1758684

# Specifications:

## DESIGN AND CONSTRUCTIONS

The switches Sealing IP requirement for panel mount applications.

Apply cable or terminal connect to the input of devices to enable power or signal.

These switches are not design for safety use.

## MATERIALS

Bushing	Aluminum nature anodized
METAL Cap	Aluminum nature anodized
Plastic Cap	PC
PCB	FR4 94V-O rated Tin plating
Sealing	Silicon, Epoxy.
Cable	UL 3386, UL10368 or Equivalent.
Connector	Customer design.
LED	RGB SMT type.

## RATING

5-24V DC / 1A

5V DC / 1A

12V DC / 1A

24V DC / 1A

## ELECTRICAL CHARACTERISTICS

Supply Voltage	5-24VDC
Max. Current	1A max.
Contact Resistance	1Ω max.
Power Consumption w/o illumination	2mA max.
Illumination power consumption	10mA max.
Output mode	NPN
Operating type	MOM. or Latch type
※ Trigger	By flowing water

## MECHANICAL CHARACTERISTICS

Actuation Force	Touch , Zero force.
Operating Life	10 Million cycle expectancy.
Cable retention force to Switch	10KG min.
Connector mating force	By connector define.
Connector un-mating force	By connector define.

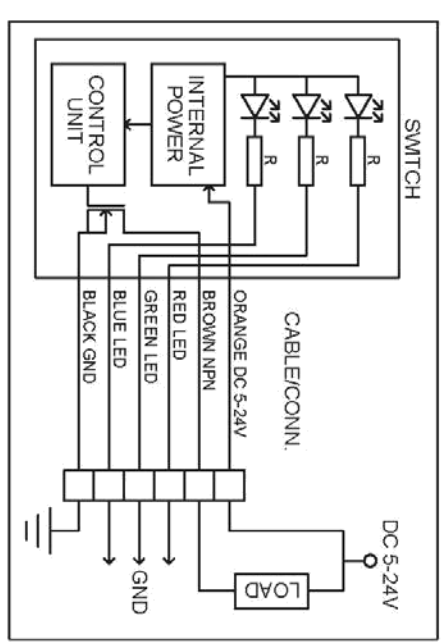
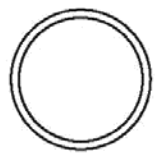
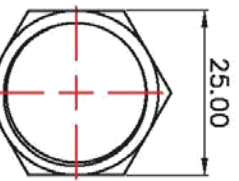
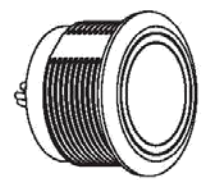
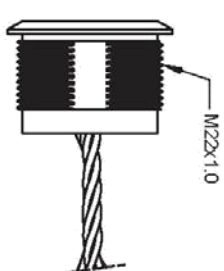
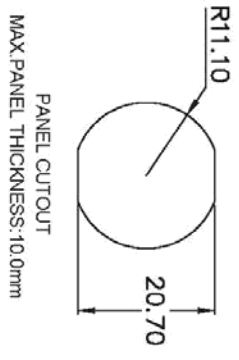
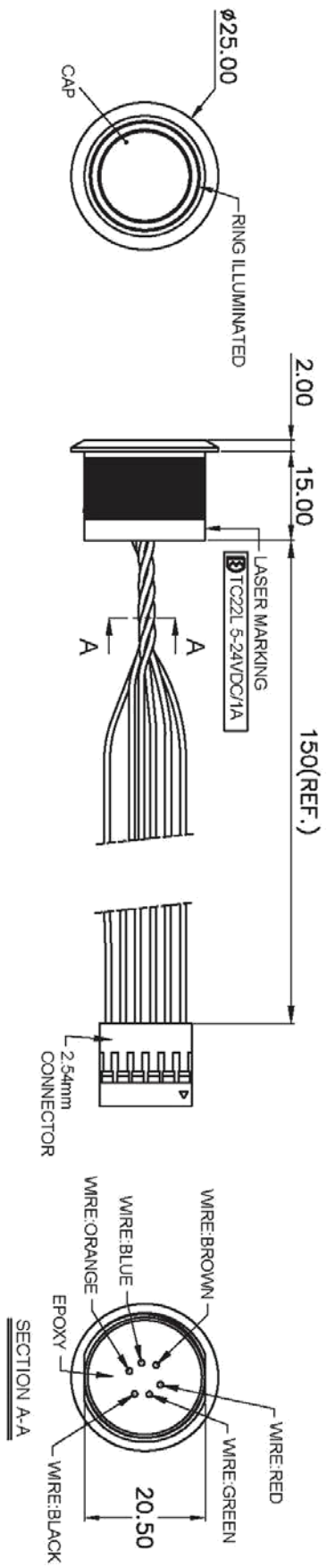
## ENVIROMENTAL CONDITIONS

Operating Temperature	-20°C to +65°C
Storage Temperature	-40°C to +85°C
The Salt Test	See test sequence
HSF	See test sequence

TEST SEQUENCE FOR QUALIFICATIONS

Electrical Parameter			
ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
1	Visual Examination	By Visual Examination check without and out pressure & testing.	There shall be no defects that affect the serviceability of the product.
2	Contact Resistance	@5VDC 1A. For transistor resistance from drain to source	1Ω Max
3	Current Rating	Continue 1 hour w/- 5Ω resistor	1A / 5VDC
4	Power Consumption w/o illumination	Without LED	2mA max.
5	Illumination power consumption	Red, Green and Blue color illumination	10mA max.

Mechanical Parameter			
ITEM	DESCRIPTION	TEST CONDITIONS	REQUIREMENTS
1	Operating Life	Life cycle tester with Touch pen	10 million cycle.
2	Cable retention force to switch	Force Analyzer	10KG min.
3	Connector mating force	Force Analyzer	By connector define
4	Connector un-mating force	Force Analyzer	By connector define



Application Diagram

INDICATOR	
SWITCH	LED
OFF	RED GREEN BLUE
ON	USER



- SPECIFICATIONS**
1. RATING: 5-24V/1A DC.
  2. TYPE: LOCK
  3. OPERATING LIFE: 50 MILLION CYCLE MIN.
  4. CONTACT RESISTANCE: 1Ω MAX.
  5. OPERATING TEMPERATURE: -20°C to 65°C
  6. INDICATOR COLOR: RED/GREEN/BLUE
- MATERIAL:**
- BUSHING: Aluminum alloy.
  - CAP: PC; Aluminum alloy.
  - SEALING: Silicone, EPOXY.
  - O-Ring: Silicone.
  - HEX NUT: Nickel plated brass.
- RoHS**

**TOLERANCE (公差):**

0.00 mm ± 0.25mm
0.0 mm ± 0.40mm
ANGULAR: ±5°

