



### 311SM4-T



*Actual product appearance may vary.*

**SM Series Subminiature Basic Switch,  
Single Pole Double Throw (SPDT), 250  
Vac, 5 A, Simulated Roller Actuator,  
Solder Termination**

#### Features

- Long operating life
- Elongated mounting hole for easier, more accurate mounting
- Choice of actuation (plunger, as well as a variety of integral and auxiliary actuators)
- Choice of electrical termination (solder, quick connect, PCB)
- Choice of operating characteristics (sensitive differential travel as low as 0,0254 mm [0.001 in] maximum, low operating force to 0,56 N [2.0 oz] maximum)
- Optional series constructions available (gold contacts for low energy switching, bifurcated gold contacts for maximum reliability, power load switching capability to 11 A)
- MIL-PFR-8805 qualified listings available

#### Potential Applications

- Aerospace
- Instrumentation
- Appliances
- Vending machines
- Timing devices
- Office equipment
- Computer/business equipment
- Test instruments
- Medical/dental equipment
- Communications equipment
- HVAC equipment
- Manually operated devices
- Valves

#### Description

MICRO SWITCH™ SM Series subminiature basic switches are used for simple or precision on/off application needs. The MICRO SWITCH™ SM Series switches are slightly larger than the MICRO SWITCH™ SX Series switches. These switches combine small size and light weight with ample electrical capacity, precision operation and long life.

Product Specifications	
Switch Type	MICRO SWITCH™ Subminiature 12,7 mm H x 6,35 mm W x 20,3 mm L [0.5 in H x 0.25 in W x 0.8 in L]
Sealed	No
Ampere Rating	5 A
Circuitry	Single Pole Double Throw (SPDT)
Actuator	Simulated Roller Lever
Termination	Solder
Operating Temperature Range	-55 °C to 125 °C [-67 °F to 257 °F]
Voltage	250 Vac
Approvals	CE,CSA,UL,ENEC
Actuator Length	6,38 mm [0.251 in]
Contact Type	Silver
Operating Force (O.F.)	0,39 N [1.4 oz] max.
Release Force (R.F.)	0,07 N [0.25 oz] max.
Pretravel (P.T.)	2,16 mm [0.085 in] max.
Overtravel (O.T.)	0,46 mm [0.018 in] min.
Differential Travel (D.T.)	0,48 mm [0.019 in] max.
Operating Position (O.P.)	11,7 mm ± 1,5 mm [0.460 in ± 0.060 in]
Housing Material	General Purpose Phenolic
High Temperature	204 °C [400 °F]
CE mark	61058-1
UL File #	E12252
CSA File #	LR41372
Agency Approvals and Standards	1054
Mounting Centers	9,65 mm [0.38 in]
Maximum Tightening Torque	0,26 N m [2.3 in lb]
Weight	2,72 g [0.006 lb]
Package Height	12,4 mm [0.49 in]
Package Width	6,35 mm [0.25 in]
Package Length	19,8 mm [0.78 in]
Recommended For	6,38 mm [0.251 in] simulated roller lever
Availability	Global
UNSPSC Code	30211905
UNSPSC Commodity	30211905 Snap switches
Series Name	SM

# MICRO SWITCH

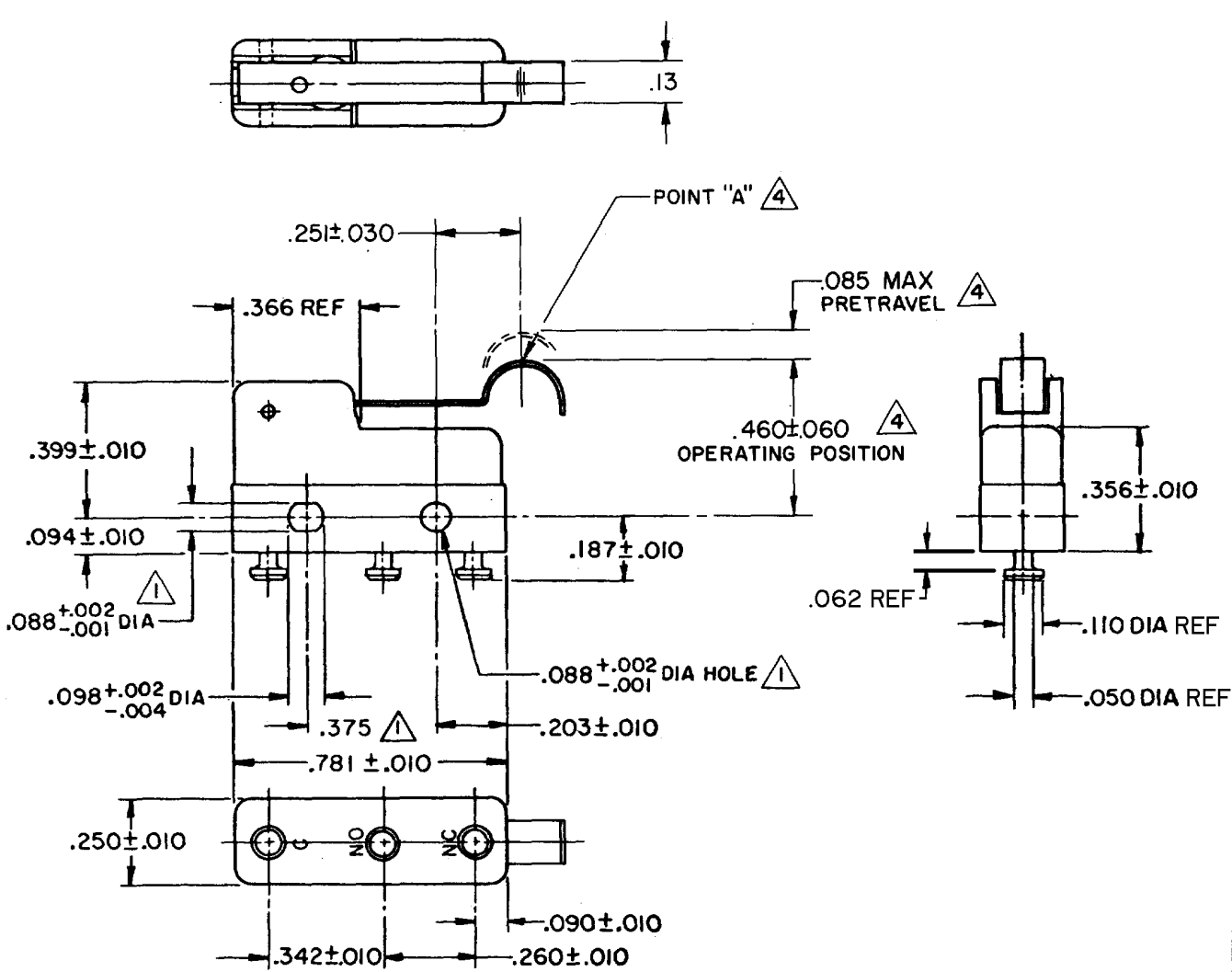
FREERPORT ILLINOIS, U.S.A  
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FED. CODE. CODE 91929

# SWITCH - BASIC

CATALOG LISTING

## 311SM4-T

DRAWING NUMBER: 311SM4-T  
 PAGE 1 OF 1  
 RELEASE NO. SR11750  
 REPLACES: SR11750  
 ISSUE: 6  
 REVISIONS:  
 A CO-31079 27 SEP 72 SRH  
 B DWG 085 CO 74108 11 JAN 93 CS  
 C RE-INS CO 74781 17 MAR 95 DAW  
 D CO-77768 12 JUL 94 SAD  
 E CO-95172 21 JUNE 99 JJA  
 CHECKED: LSD  
 DRAWN: SRH  
 FORMTEK FD-52848



**NOTE -**

- 1- MOUNTING HOLES WILL ACCEPT PINS OR SCREWS OF .087 MAX DIA ON .375 ± .002 CENTERS
- 2- SWITCH WILL WITHSTAND TEMPERATURE OF 250°F
- 3- TERMINALS ARE PLATED FOR SOLDERING
- 4- CHARACTERISTICS TAKEN AT POINT "A"

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CHARACTERISTICS	ELECTRICAL DATA	SCALE 2 TO 1
OPERATING FORCE ----- 40 GRAM MAX	CONTACT ARRANGEMENT S P D T	DO NOT SCALE PRINT
RELEASE FORCE ----- 7 GRAM MIN	30 VOLTS DC RATING	UNLESS OTHERWISE NOTED
DIFFERENTIAL TRAVEL ----- .019 MAX	INDUCTIVE ----- SEA LEVEL -- 3 AMP	DIMENSIONS ARE IN INCHES
OVERTRAVEL ----- .018 MIN	50,000 FT -- 2.5 AMP	<b>TOLERANCES ARE</b>
	RESISTIVE ----- SEA LEVEL -- 5 AMP	ONE PLACE (.0) ± .030
	50,000 FT -- 5 AMP	TWO PLACE (.00) ± .015
	MAXIMUM INRUSH ----- 24 AMP	THREE PLACE (.000) ± .005
	5A 250 VAC ~	ANGLES ±
		WEIGHT .006 LB MAX