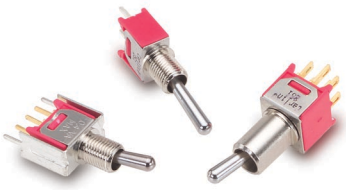
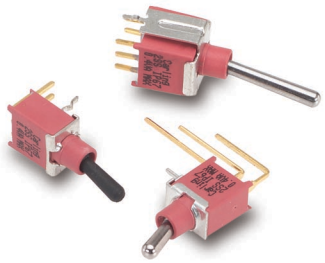
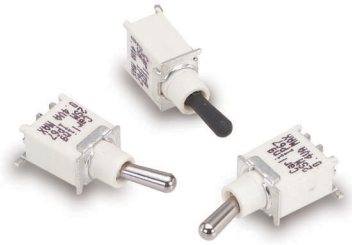


2S1-Series
Sub-Miniature Toggle Switch



2SS-Series
Sealed Sub-Miniature Toggle Switch



2SM-Series
Sealed Surface Mount Sub-Miniature Toggle Switch

Specifications

Contact Rating . . . . . refer to ordering scheme
Electrical Life . . . . . 30,000 make & break cycles @ full load
Contact Resistance. . . . . 20 mΩ max. initial @ 2-4 VDC 100mA for both silver & gold plated contacts.
Insulation Resistance . . . 1000 MΩ min.
Dielectric Strength . . . . . 1500 Volts RMS @ sea level
Operating Temperature . . . -30°C to +85°C
Index of Protection . . . . . *2SS & 2SM-Series:* IP67
Solder Heat Resistance. . . MIL-STD-202, Method 210
Actuator Travel . . . . . 25°

Materials

Case . . . . . all UL 94 V-0
2S1-Series: Dially phthalate (DAP)
2SS-Series: Glass filled nylon 6/6, flame retardant, heat stabilized
2SM-Series: Glass filled nylon 4/6, flame retardant, heat stabilized

Toggle. . . . . *2S1-Series:* Brass, chrome plated.
2SS & 2SM-Series: Brass, chrome plated or nylon, internal o-ring sealed

Bushing . . . . . *2S1-Series:* Brass, nickel plated
2SS-Series: Glass filled nylon 6/6, flame retardant, heat stabilized (UL 94V-0)
2SM-Series: Glass filled nylon 4/6, flame retardant, heat stabilized (UL 94V-0)

Housing. . . . . .Stainless Steel
Switch Support . . . . . .Brass, tin plated
Terminal Seal . . . . . Epoxy

2S1-Series Ordering Scheme

2S1	-	MSP	1	-	T1	-	B4	-	M6	Q	E
1 Series		*2 Poles*	*3 Circuit*		*4 Actuator Style*		*5 Bushing*		*6 Termination*	*7 Contact*	*8 Seal*

1 SERIES
2S1 Sub-Miniature Toggle Switch

2 POLES
MSP single pole - uses terminals 1, 2 & 3.
MDP double pole uses terminals 1,2, 3, 4, 5 & 6.

3 CIRCUIT
( ) - momentary

	Switching Position: *2-3, 5-6*	*OPEN*	*2-1, 5-4*
1	ON	NONE	ON
2	ON	NONE	(ON)
3	ON	OFF	ON
4	(ON)	OFF	(ON)
5	ON	OFF	(ON)

4 ACTUATOR STYLE
T1 Round toggle .358 length
T2 Round toggle .220 length
T3 Round toggle .299 length
T4 Round toggle .433 length

5 BUSHING[1]
B1 Threaded Standard, keyway
B2 Non-Threaded Standard, keyway
B3 Threaded Short, keyway
B4 Non-Threaded Short, keyway
B5 High Torque, 7.5mm, flat
B6 High Torque, 8.0mm, keyway
B7 Long threaded
B8 Metric

Note:
1 All Switches come with standard nut, washer and locking ring shipped bulk. B5 & B7 bushing styles use small locking ring.

6 TERMINATION
M1 Solder Lug
M2 PCB
M6 PC Mount, 90° horizontal
M7 PC Mount, 90° vertical
VS2 PC Mount, U bracket, .620 mounting x .460 high
VS3 PC Mount, U bracket, .620 mounting x .630 high
VS21 Snap-In, U bracket

7 CONTACT

	Material	*Terminal Plating*	*Rating*	*Approvals*
G	silver[1]	gold over silver[3]	3A@125VAC or 28VDC, 1.5A @ 250VAC	UL CSA
K	gold[2]	tin-lead[4]	0.4VA max. @20V max (AC/DC)	–
P	silver[1]	tin-lead[4]	3A@125VAC or 28VDC, 1.5A @ 250VAC	UL CSA
Q	silver[1]	silver[1]	3A@125VAC or 28VDC, 1.5A @ 250VAC	UL CSA
R	gold[2]	gold[2]	0.4VA max. @20V max (AC/DC)	–

NOTE:
Tin-lead option available with PC type terminations only.
1 Moveable contact & terminals: copper alloy, silver plate
2 Moveable contact & terminals: copper alloy with gold plated over nickel plate
3 Terminals: silver plate with outer layer in gold plating
4 Outer terminals: copper alloy with tin-lead over nickel plate

8 EPOXY SEAL
E epoxy seal

2SS-Series Ordering Scheme

2SS	-	MSP	1	-	T1	-	B4	-	M6	G	E
1 Series		*2 Poles*	*3 Circuit*		*4 Actuator Style*		*5 Bushing*		*6 Termination*	*7 Contact*	*8 Seal*

1 SERIES
2SS Sealed Sub-Miniature Toggle Switch

2 POLES
MSP single pole - uses terminals 1, 2 & 3.
MDP double pole uses terminals 1,2, 3, 4, 5 & 6.

3 CIRCUIT
( ) - momentary

Switching Position:

	2-3, 5-6	*OPEN*	*2-1, 5-4*
1	ON	NONE	ON
2	ON	NONE	(ON)
3	ON	OFF	ON
4	(ON)	OFF	(ON)
5	ON	OFF	(ON)

4 ACTUATOR STYLE
T1 Round toggle .358 length
T2 Round toggle .220 length
T3 Round toggle .299 length
T4 Round toggle .433 length
P1 ESD resistant plastic toggle .421 length
P2 ESD resistant plastic toggle .272 length

5 BUSHING
B4 Unthreaded bushing

6 TERMINATION

M2	PCB
M6	PC Mount, 90° horizontal
M61	Snap-In PC Mount, 90° horizontal
M7	PC Mount, 90° vertical
M71	Snap-In PC Mount, 90° vertical
VS2	PC Mount, U bracket, .620 mounting x .460 high
VS21	Snap-In, U bracket

7 CONTACT

	Material	*Terminal Plating*	*Rating*	
G	silver[1]	gold over silver[3]	3A@125VAC or 28VDC, 1.5A @ 250VAC	IP67
K	gold[2]	tin-lead plated[4]	0.4VA max. @20V max (AC/DC)	IP67
P	silver[1]	tin-lead plated[4]	3A@125VAC or 28VDC, 1.5A @ 250VAC	IP67
R	gold[2]	gold plated[2]	0.4VA max. @20V max (AC/DC)	IP67

NOTE:
Tin-lead option available with PC type terminations only.
1 Moveable contact & terminals: copper alloy, silver plate
2 Moveable contact & terminals: copper alloy with gold plate over nickel plate
3 Terminals: silver plate with outer layer in gold plating
4 Outer terminals: copper alloy with tin-lead over nickel plate

8 EPOXY SEAL
E epoxy seal

2SM-Series Ordering Scheme

2SM	-	MSP	1	-	T1	-	M6	G	E	
1 Series		*2 Poles*	*3 Circuit*		*4 Actuator Style*		*5 Termination*	*6 Contact*	*7 Seal*	*8 Packaging*

1 SERIES
2SM Sealed Surface Mount Sub-Miniature Toggle Switch

2 POLES
MSP single pole - uses terminals 1, 2 & 3.

3 CIRCUIT
( ) - momentary

Switching Position:

	2-3	*OPEN*	*2-1*
1	ON	NONE	ON
2	ON	NONE	(ON)
3	ON	OFF	ON
4	(ON)	OFF	(ON)
5	ON	OFF	(ON)

4 ACTUATOR STYLE
T1 Round toggle .358 length
T2 Round toggle .220 length
P1 ESD resistant plastic toggle .421 length
P2 ESD resistant plastic toggle .272 length

5 TERMINATION

M6	Surface Mount, 90° flat
M7	Surface Mount, 90° vertical
S6	Surface Mount, 90° horizontal

6 CONTACT

	Material	*Terminal Plating*	*Rating*	
G	silver[1]	gold over silver[3]	3A@125VAC or 28VDC, 1.5A @ 250VAC	IP67
K	gold[2]	tin-lead plated[4]	0.4VA max. @20V max (AC/DC)	IP67
P	silver[1]	tin-lead plated[4]	3A@125VAC or 28VDC, 1.5A @ 250VAC	IP67
R	gold[2]	gold plated[2]	0.4VA max. @20V max (AC/DC)	IP67

NOTE:
Tin-lead option available with PC type terminations only.
1 Moveable contact & terminals: copper alloy, silver plate
2 Moveable contact & terminals: copper alloy with gold plate over nickel plate
3 Terminals: silver plate with outer layer in gold plating
4 Outer terminals: copper alloy with tin-lead over nickel plate

7 EPOXY SEAL
E epoxy seal

8 PACKAGING
Switches are bulk packed, unless **T/R** is specified at the end of the part number.

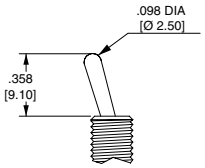
T/R tape reel - 500 pieces per reel

2S-Series Dimensional Specifications: in. [mm]

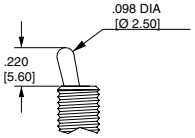
2S1-Series

ACTUATOR

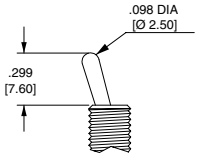
T1[1]
Round Bat



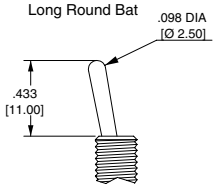
T2 [1]
Round Short Bat



T3
Round Bat

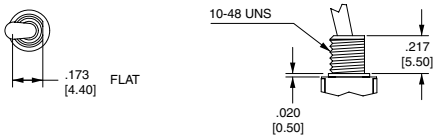


T4
Long Round Bat

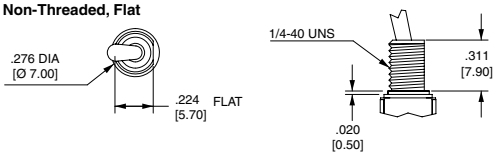


BUSHING

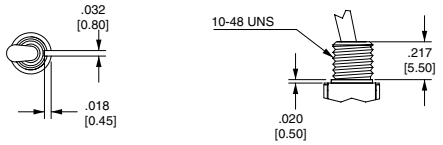
B1[1] **Threaded, Flat**
B2 **Non-Threaded, Flat**



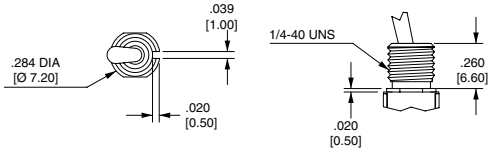
B5 **Threaded, Flat**
B6 **Non-Threaded, Flat**



B3 **Threaded Keyway**
B4 **Non-Threaded Keyway**

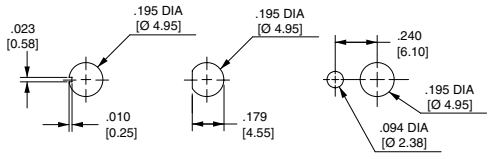


B7 **Threaded Keyway**
B8 **Non-Threaded Keyway**



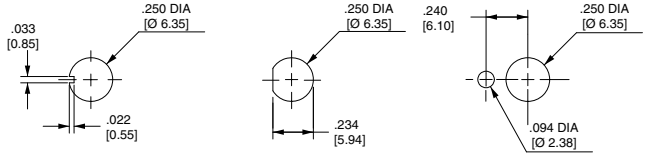
PANEL MOUNTING

10-48 BUSHING
(B1,B2,B3,B4 BUSHINGS)



Without Locking Ring | With Small Locking Ring

1/4 IN. BUSHING
(B5,B6,B7,B8 BUSHINGS)

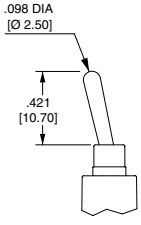


Without Locking Ring | With Small Locking Ring

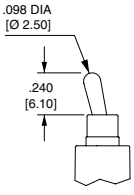
2SS-Series

ACTUATOR

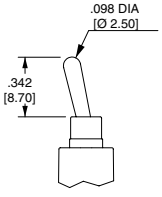
T1



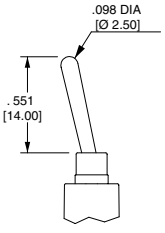
T2



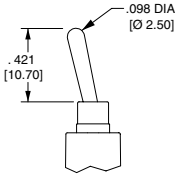
T3



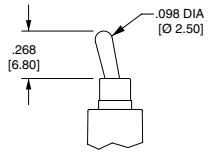
T4



P1 **ESD Resistant Plastic Toggle**

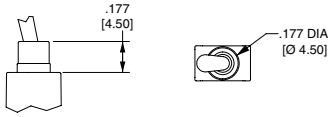


P2 **ESD Resistant Plastic Toggle**



BUSHING

B4



NOTE:
1 Subtract 2.55mm from toggle length for B1 bushing.

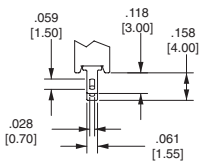
2S-Series Dimensional Specifications: in. [mm]

TERMINATION

2S1-Series

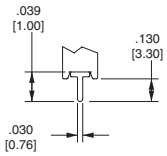
SINGLE POLE

M1
Standard Solder Lug



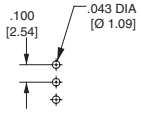
.020 [0.50] Thk.

M2
PCB



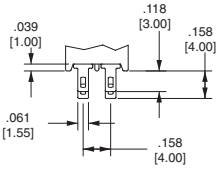
.020 [0.50] Thk.

PC MOUNTING



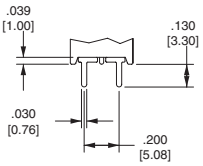
DOUBLE POLE

M1
Standard Solder Lug



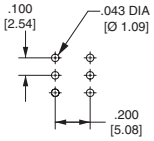
.020 [0.50] Thk.

M2
PCB



.020 [0.50] Thk.

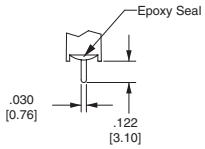
PC MOUNTING



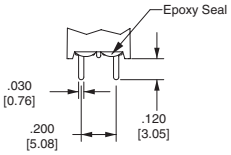
2SS-Series

M2

SINGLE POLE



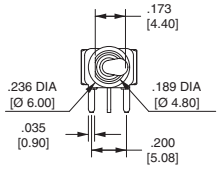
DOUBLE POLE

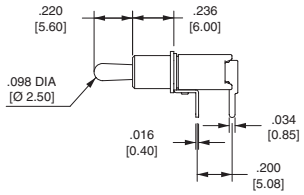


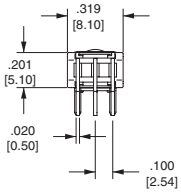
2S-Series

M6

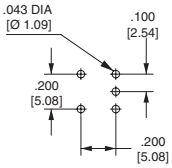
SINGLE POLE



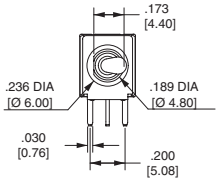


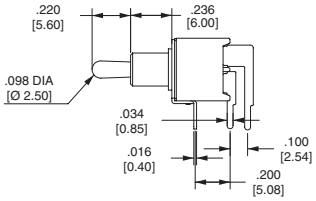


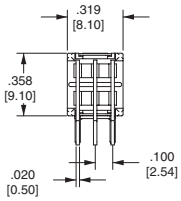
PC MOUNTING



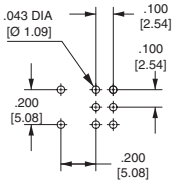
DOUBLE POLE







PC MOUNTING

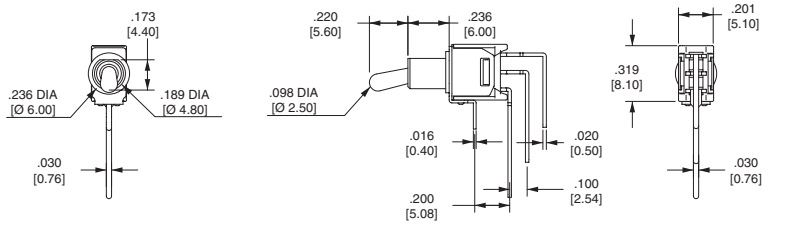


2S-Series Dimensional Specifications: in. [mm]

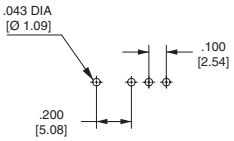
TERMINATION

M7

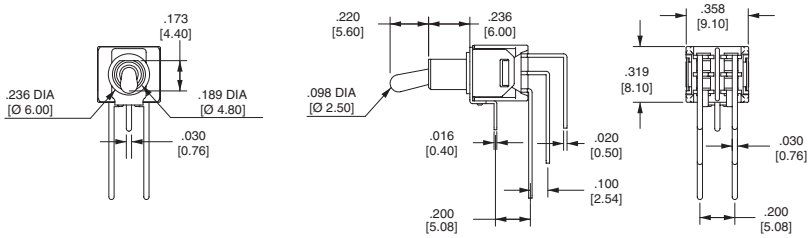
SINGLE POLE



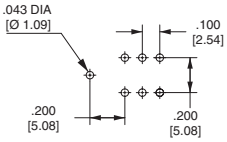
PC MOUNTING



DOUBLE POLE

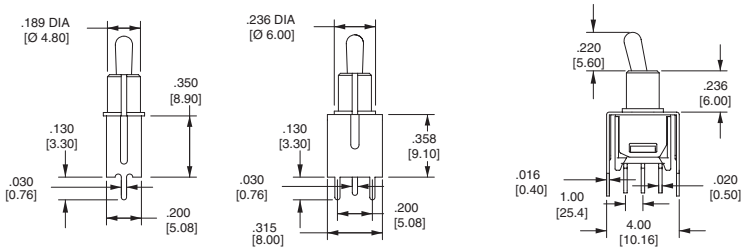


PC MOUNTING

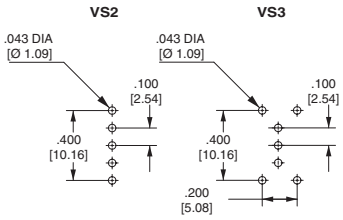


VS2-VS3
U Bracket Snap-in

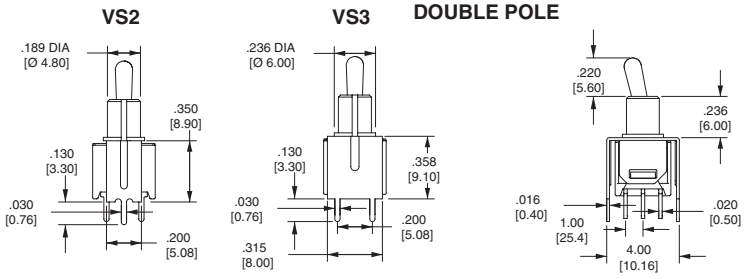
VS2 **VS3** **SINGLE POLE**



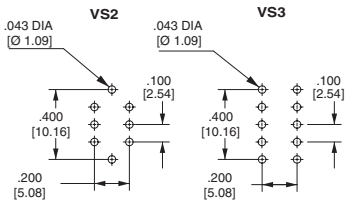
PC MOUNTING



VS2 **VS3** **DOUBLE POLE**

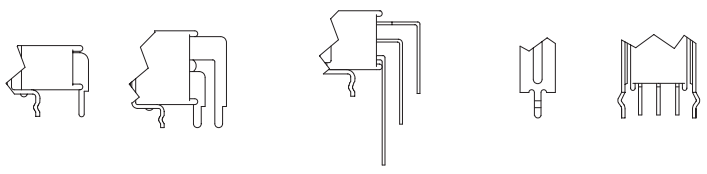


PC MOUNTING



SNAP-IN TERMINATION

M61 **M71** **VS21**

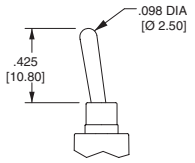


M61,M71,VS21 have the same P.C. mounting but with snap-in bracket.

2SM-Series Dimensional Specifications: in. [mm]

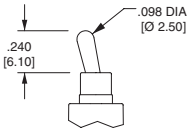
ACTUATOR

T1
Round Bat

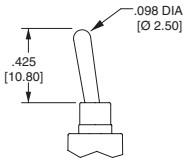


For S6,M7 Only

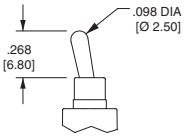
T2
Round Bat



P1
ESD Resistant Plastic Toggle

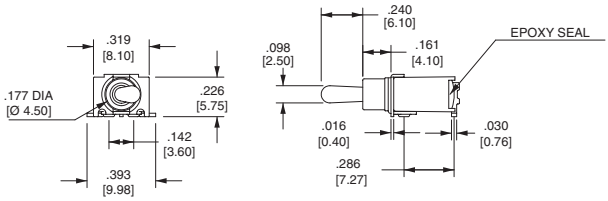


P2
ESD Resistant Plastic Toggle

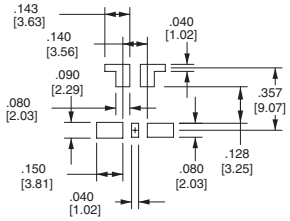


TERMINATION

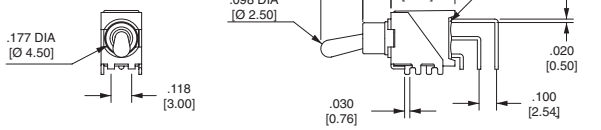
M6
90° Horizontal



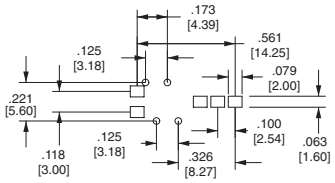
PC MOUNTING



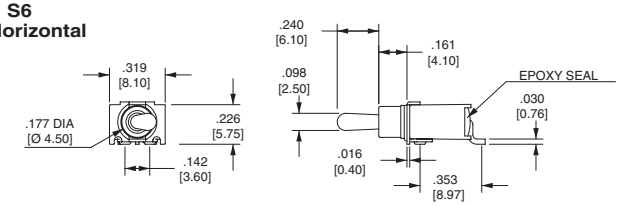
M7
90° Vertical



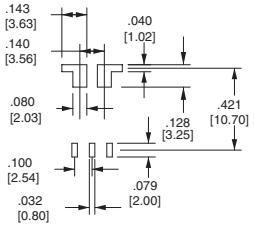
PC MOUNTING



S6
90° Horizontal

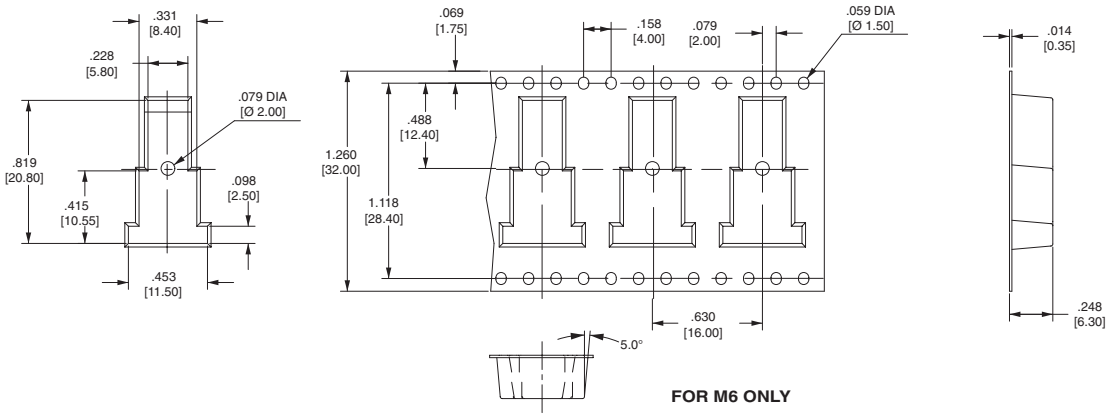


PC MOUNTING

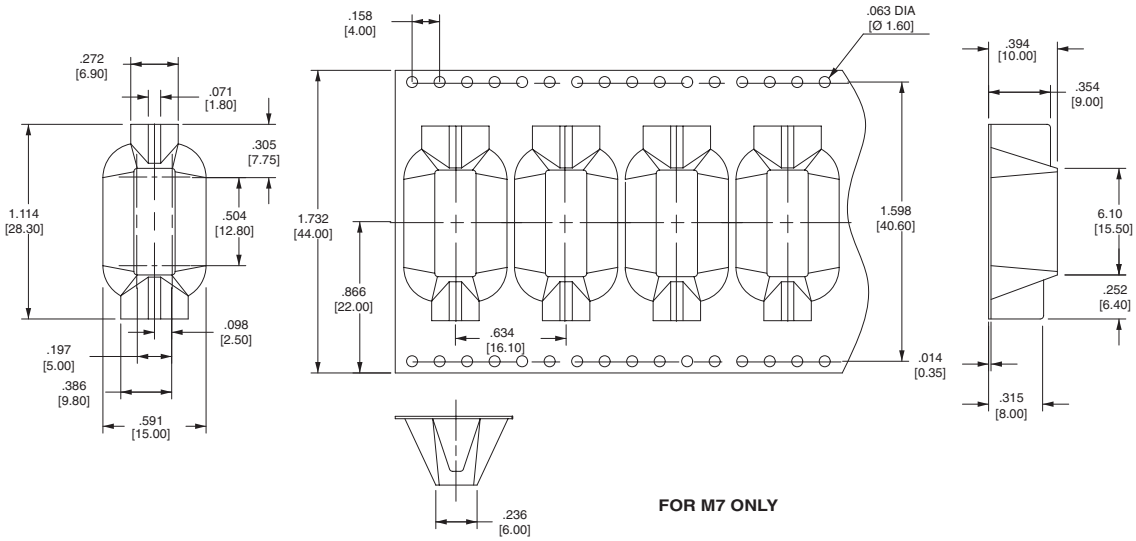


2SM-Series Dimensional Specifications: in. [mm]

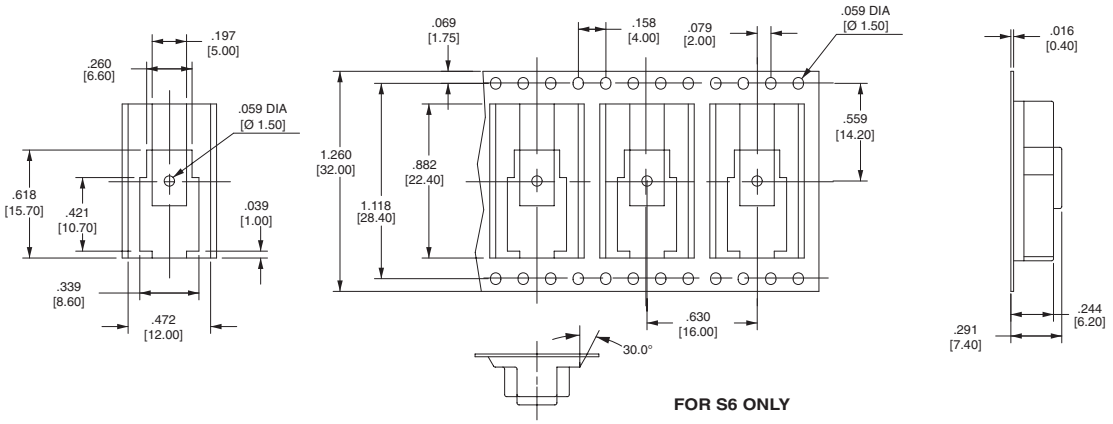
REEL TAPING



FOR M6 ONLY



FOR M7 ONLY



FOR S6 ONLY

LifeElectronics
Живое партнерство

ООО «ЛайфЭлектроникс» **“LifeElectronics” LLC**

ИНН 7805602321 КПП 780501001 Р/С 40702810122510004610 ФАКБ "АБСОЛЮТ БАНК" (ЗАО) в г.Санкт-Петербурге К/С 30101810900000000703 БИК 044030703

Компания «Life Electronics» занимается поставками электронных компонентов импортного и отечественного производства от производителей и со складов крупных дистрибьюторов Европы, Америки и Азии.

С конца 2013 года компания активно расширяет линейку поставок компонентов по направлению коаксиальный кабель, кварцевые генераторы и конденсаторы (керамические, пленочные, электролитические), за счёт заключения дистрибьюторских договоров

Мы предлагаем:

- *Конкурентоспособные цены и скидки постоянным клиентам.*
- *Специальные условия для постоянных клиентов.*
- *Подбор аналогов.*
- *Поставку компонентов в любых объемах, удовлетворяющих вашим потребностям.*

- *Приемлемые сроки поставки, возможна ускоренная поставка.*
- *Доставку товара в любую точку России и стран СНГ.*
- *Комплексную поставку.*
- *Работу по проектам и поставку образцов.*
- *Формирование склада под заказчика.*

- *Сертификаты соответствия на поставляемую продукцию (по желанию клиента).*
- *Тестирование поставляемой продукции.*
- *Поставку компонентов, требующих военную и космическую приемку.*
- *Входной контроль качества.*
- *Наличие сертификата ISO.*

В составе нашей компании организован Конструкторский отдел, призванный помогать разработчикам, и инженерам.

Конструкторский отдел помогает осуществить:

- *Регистрацию проекта у производителя компонентов.*
- *Техническую поддержку проекта.*
- *Защиту от снятия компонента с производства.*
- *Оценку стоимости проекта по компонентам.*
- *Изготовление тестовой платы монтаж и пусконаладочные работы.*

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