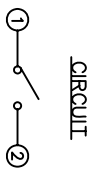
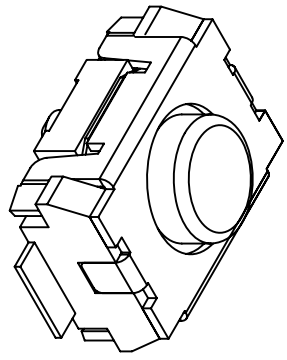
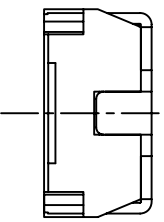
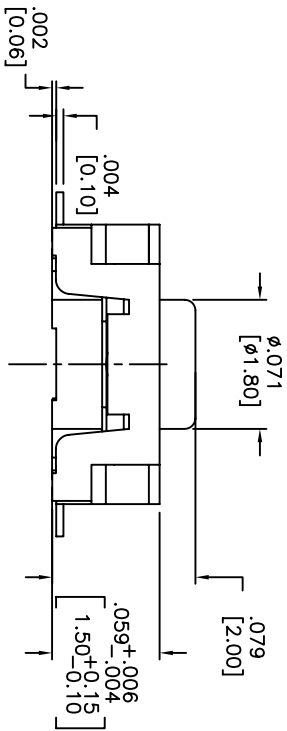
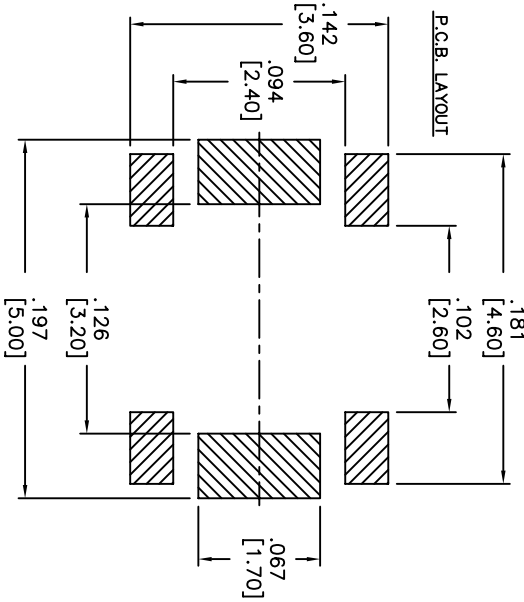
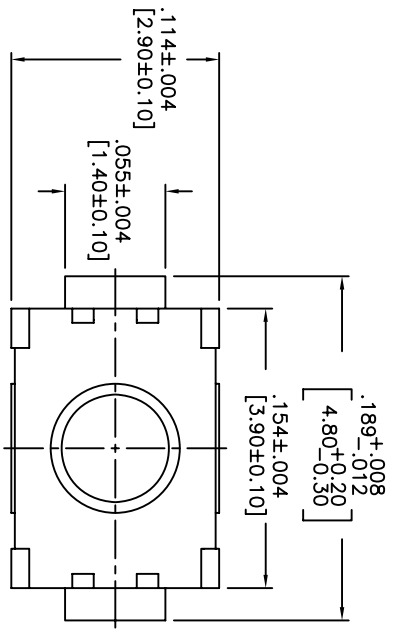


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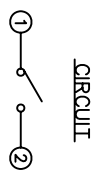
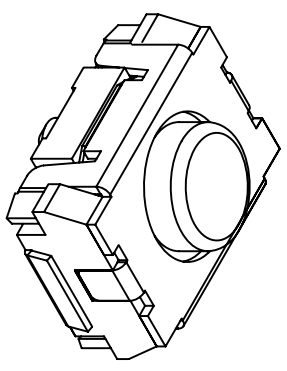
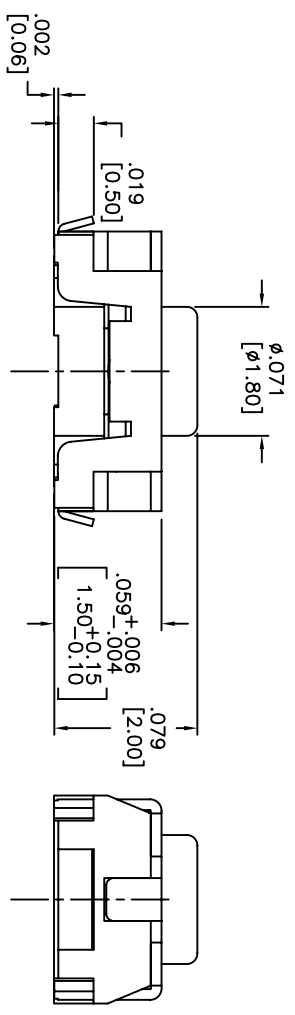
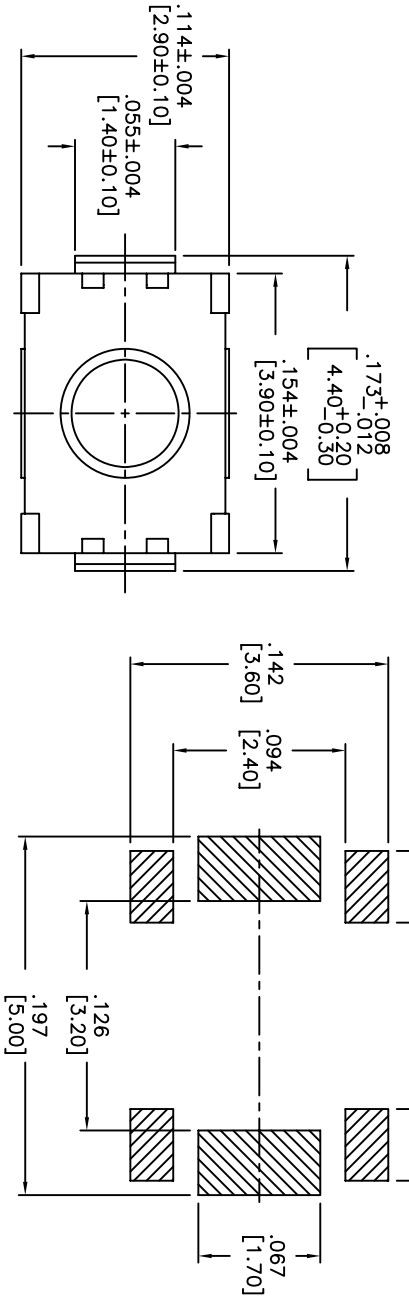


DATE	SYM	REVISION RECORD	DWN.	CK.
5/08	B	ECO# 778	CD	PD

DESCRIPTION: VERTICAL PUSH MECHANICAL CONTACT SWITCH.
 SPECIFICATIONS:
 OPERATION FORCE: 160±50gf
 OPERATION TEMP.: -25°C TO +70°C.
 STORAGE TEMP.: -30°C TO +80°C.
 ELECTRICAL LIFE: 100,000 CYCLES.
 RATING: 50ma, 12VDC.
 VIBRATION RESISTANCE: PASSES METHOD 201A MIL-STD-202F
 SHOCK RESISTANCE: 50G PER METHOD 213B MIL-STD-202F
 CONTACT RESISTANCE: 100mΩ MAX.
 INSULATION RESISTANCE: 100MΩ MIN. AT 100VDC.
 DIELECTRIC STRENGTH: 100VAC/1 MINUTE.
 CONTACT ARRANGEMENT: 1 POLE 1 THROW.
 MATERIALS:
 COVER: STAINLESS STEEL
 BASE: LCP HIGH-TEMP. THERMOPLASTIC.
 COLOR, WHITE.
 STEM: LCP HIGH-TEMP. THERMOPLASTIC.
 COLOR, BLACK
 CONTACT DISK: STAINLESS STEEL WITH SILVER CLADDING
 TERMINAL: BRASS WITH SILVER PLATING
 TAPE: TEFLON.
 TAPE & REEL PACKAGING, 2,000 PER REEL
 SOLDERING:
 HAND SOLDERING: 30 WATT IRON AT 320°C FOR 2 SECONDS
 IR REFLOW: 240°C MAX
 ROHS COMPLIANT

0A. INSPECT:		63 Neck Rd. Haverhill, MA 01830 Telephone: 978-372-5554 Fax: 978-372-5554		DRN. CJD BR:
DESIGNER: CRITICAL DIMENSION		SHEET 1 OF 1	SIZE B	SCALE 15:1
TOLERANCES (UNLESS AS NOTED) .XX±.01(0.5) .XXX±.008(0.20) .XXXX±.0008(0.02) ANGLE = 30.5°		TITLE VERTICAL PUSH TACT SWITCH		THIRD ANGLE PROJECTION
DO NOT SCALE DRAWING NO.	DATE 2/4/08	DRAWING NO. AMPPTFGP2VTR		REV B

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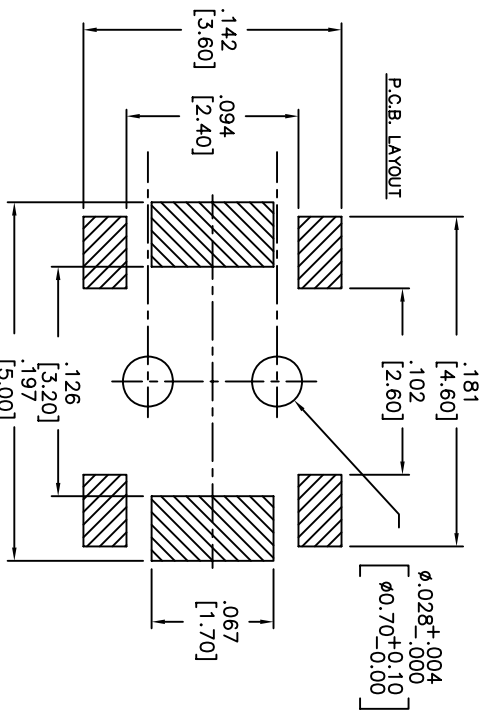
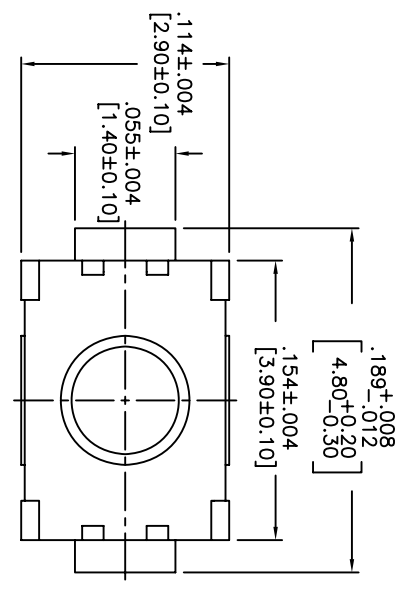
DATE	SYM	REVISION RECORD	DWNL	CK
5/08	B	ECO# 778	CD	PD

DESCRIPTION: VERTICAL PUSH MECHANICAL CONTACT SWITCH.
 SPECIFICATIONS:
 OPERATION FORCE: 160± 50gf
 OPERATION TEMP.: -25°C TO +70°C.
 STORAGE TEMP.: -30°C TO +80°C.
 ELECTRICAL LIFE: 100,000 CYCLES.
 RATING: 50mA, 12VDC.
 VIBRATION RESISTANCE: PASSES METHOD 201A MIL-STD-202F
 SHOCK RESISTANCE: 50G PER METHOD 213B MIL-STD-202F
 CONTACT RESISTANCE: 100mΩ MAX.
 INSULATION RESISTANCE: 100MΩ MIN. AT 100VDC.
 DIELECTRIC STRENGTH: 100VAC/1 MINUTE.
 CONTACT ARRANGEMENT: 1 POLE 1 THROW.
 MATERIALS:
 COVER: STAINLESS STEEL
 BASE: LCP HIGH-TEMP. THERMOPLASTIC.
 COLOR, WHITE.
 STEM: LCP HIGH-TEMP. THERMOPLASTIC.
 COLOR, BLACK.
 CONTACT DISK: STAINLESS STEEL
 WITH SILVER CLADDING
 TERMINAL: BRASS WITH SILVER PLATING
 TAPE: TEFLON.
 TAPE & REEL PACKAGING, 2,000 PER REEL
 SOLDERING:
 HAND SOLDERING: 30 WATT IRON AT 320°C FOR 2 SECONDS
 IR REFLOW: 240°C MAX
 ROHS COMPLIANT

Q.A. INSPECT: 		DESIGNER'S CRITICAL DIMENSION	
TOLERANCES (UNLESS OTHERWISE SPECIFIED) .XX = ±0.005 .XXX = ±0.008 .XXXX = ±0.008 ANGLE = 40.5°		APDM 63 Nork Rd. Hawthorn Hill, VA 01835 478-372-5554 Fax: 478-372-5554	
DESIGNER: JLD DATE: 2/4/08	DRWNG. NO.: AMPTLGP2VTR	REV: B	CD PJD
TITLE: VERTICAL PUSH TACT SWITCH		SCALE: 15:1	

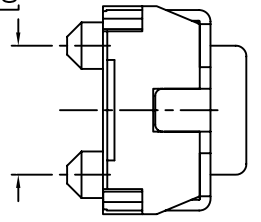
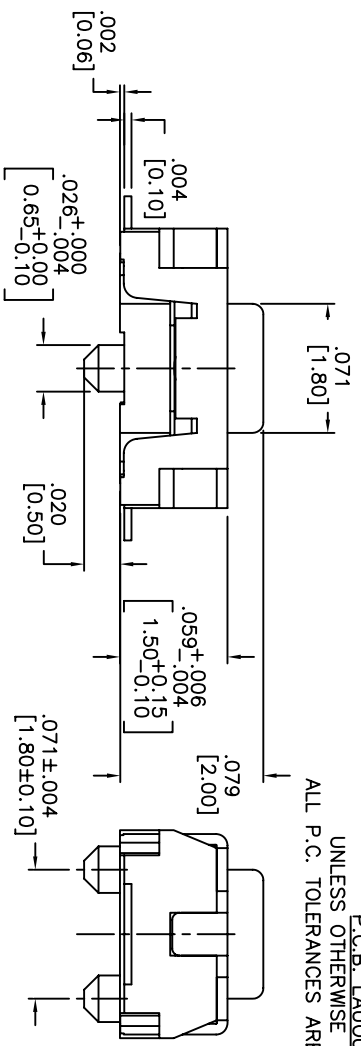
1 2 3 4 5 6 7 8

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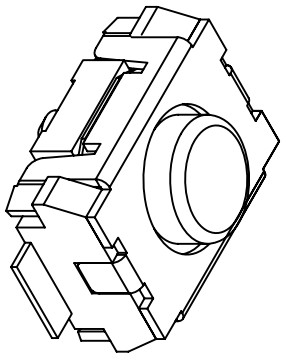


HATCHED AREA SHOWS SOLDERING LAND

P.C.B. LAYOUT
UNLESS OTHERWISE SPECIFIED
ALL P.C. TOLERANCES ARE ±.002 [0.50]



CIRCUIT



DATE	SYM	REVISION RECORD	DWN.	CK.
5/08	B	ECO# 778	CD	PD

DESCRIPTION: VERTICAL PUSH MECHANICAL CONTACT SWITCH.

SPECIFICATIONS:

OPERATION FORCE: 160± 50gf
 OPERATION TEMP.: -25°C TO +70°C.
 STORAGE TEMP.: -30°C TO +80°C.
 ELECTRICAL LIFE: 200,000 CYCLES.
 RATING: 50ma, 12VDC.
 VIBRATION RESISTANCE: PASSES METHOD 201A
 MIL-STD-202F
 SHOCK RESISTANCE: 50G PER METHOD 213B
 MIL-STD-202F
 CONTACT RESISTANCE: 100mΩ MAX.
 INSULATION RESISTANCE: 100MΩ MIN. AT 100VDC.
 DIELECTRIC STRENGTH: 100VAC/1 MINUTE.
 CONTACT ARRANGEMENT: 1 POLE 1 THROW.
 TRAVEL: .005 ±.002 [0.13 ±0.05]

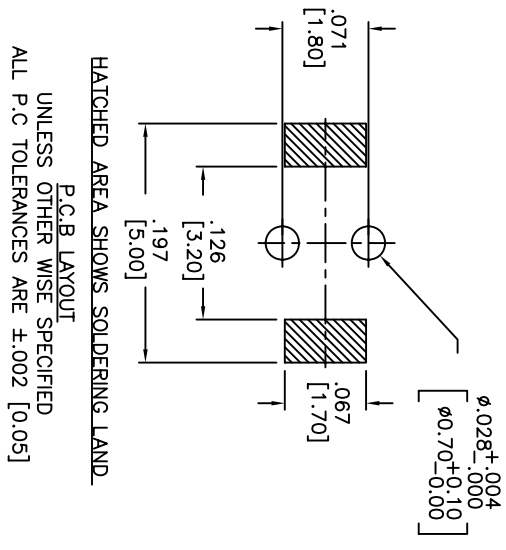
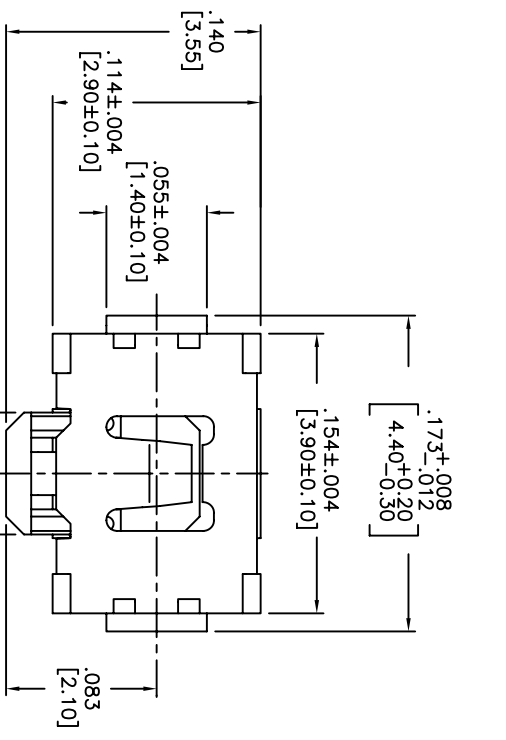
MATERIALS:

COVER: STAINLESS STEEL
 BASE: LCP HIGH-TEMP. THERMOPLASTIC.
 COLOR, WHITE.
 STEM: LCP HIGH-TEMP. THERMOPLASTIC.
 COLOR, BLACK.
 CONTACT DISK: STAINLESS STEEL WITH SILVER CLADDING
 TERMINAL: BRASS WITH SILVER PLATING
 TAPE: TEFLON.
 TAPE & REEL PACKAGING: 2,000 PER REEL
 SOLDERING:
 HAND SOLDERING: 30 WATT IRON AT 320°C FOR 2 SECONDS
 IR REFLOW: 240°C MAX
 ROHS COMPLIANT

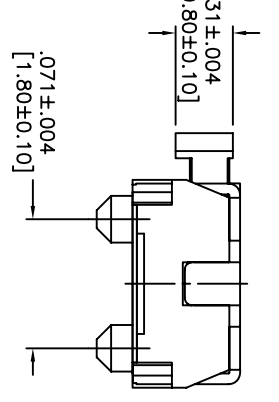
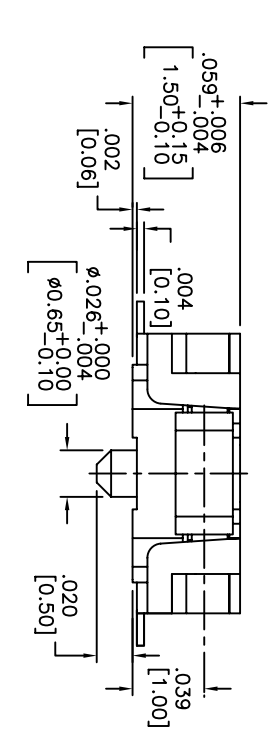
Q.A. INSPECT:	DESIGNER'S INITIAL:	APDM	63 Neck Rd. Haverhill, MA 01830 Phone: 978-372-5554 Fax: 978-372-5554	DRN. CJD
TOLERANCES (UNLESS OTHERWISE SPECIFIED)	INCH (MM)	SHEET 1 OF 1	SIZE B	SCALE 15:1
.XX±.XX [0.5]	.XX±.XX [0.5]			
.XXX±.XXX [0.20]	.XXX±.XXX [0.20]			
.XXXX±.XXXX [0.02]	.XXXX±.XXXX [0.02]			
ANGLE = 30.5°				
DO NOT SCALE	DATE 6/30/05	DRAWING NO. AMPTCFGP2VTR		REV B

TITLE	TACT SWITCH
THIRD ANGLE PROJECTION	

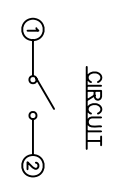
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HATCHED AREA SHOWS SOLDERING LAND
P.C.B. LAYOUT
UNLESS OTHER WISE SPECIFIED
ALL P.C TOLERANCES ARE ±.002 [0.05]



UNLESS OTHER WISE SPECIFIED
ALL P.C TOLERANCES ARE ±.002 [0.05]



DATE	SYM	REVISION RECORD	DWN.	CK.
5/08	B	ECO# 778	CD	PD

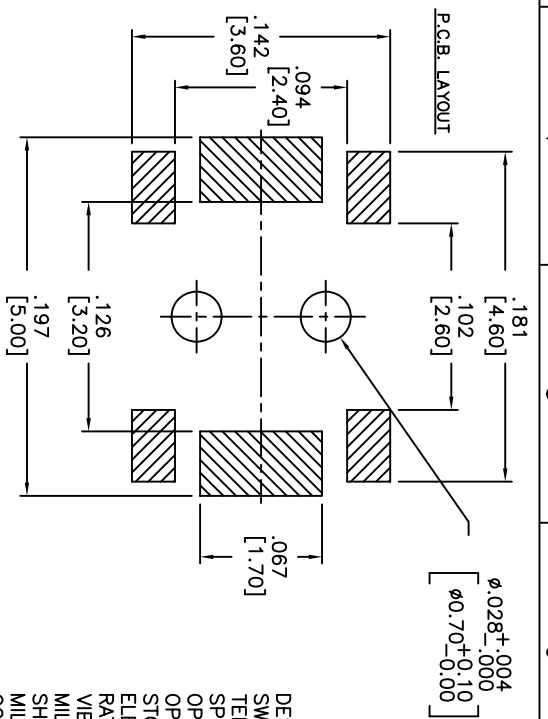
DESCRIPTION: SIDE PUSH MECHANICAL CONTACT SWITCH.
SPECIFICATIONS:
OPERATION FORCE: 220± 65gf
STROKE: 0.2±0.10mm
OPERATION TEMP.: -25°C TO +70°C.
STORAGE TEMP.: -30°C TO +80°C.
ELECTRICAL LIFE: 100,000 CYCLES.
RATING: 50mA, 12VDC.
CONTACT RESISTANCE: 100mΩ MAX.
INSULATION RESISTANCE: 100MΩ MIN. AT 100VDC.
DIELECTRIC STRENGTH: 100VAC/1 MINUTE.
CONTACT ARRANGEMENT: 1 POLE 1 THROW.
VIBRATION TEST: PASSED METHOD 201A
MIL-STD-202F.
SHOCK TEST: 50G PER METHOD 213B CONDITION A OF MIL-STD-202F
MATERIALS:
COVER: STAINLESS STEEL
BASE: LCP HIGH-TEMP. THERMOPLASTIC.
COLOR, WHITE.
STEM: LCP HIGH-TEMP. THERMOPLASTIC.
COLOR, BLACK.
CONTACT DISK: STAINLESS STEEL
WITH SILVER CLADDING
TERMINAL: BRASS WITH SILVER PLATING
PACKAGING: TAPE AND REEL
(3,500 PEICES PER REEL)
ROHS COMPLIANT
LEAD FREE SOLDERING COMPATIBLE
HAND SOLDERING: 320°C MAX WITH 30 WATT IRON FOR 2 SECONDS
IR REFLOW: 260°C MAX

DESIGNER'S SYMBOL		DESIGNER'S INITIALS		DATE	
TOLERANCES (UNLESS OTHERWISE SPECIFIED)		SCALE		DRAWING NO.	
.XX±.XX [0.5]		15:1		AMPTCFVTR	
.XXX±.XXX [0.20]		THIRD ANGLE PROJECTION		REV	
.XXXX±.XXXX [0.02]		P.D.		B	
ANGLE = 30.5°		CJD			
DO NOT SCALE		P.J.D.			
DATE		DRAWING NO.		REV	
5/2/06		AMPTCFVTR		B	

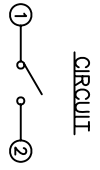
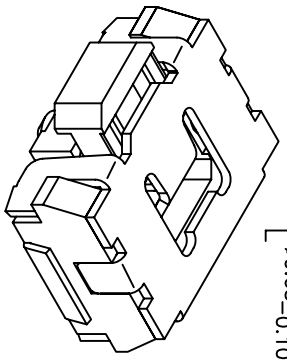
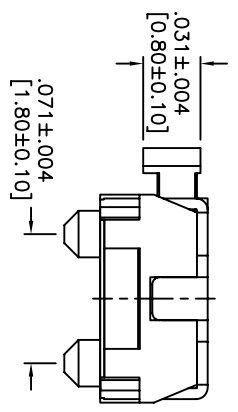
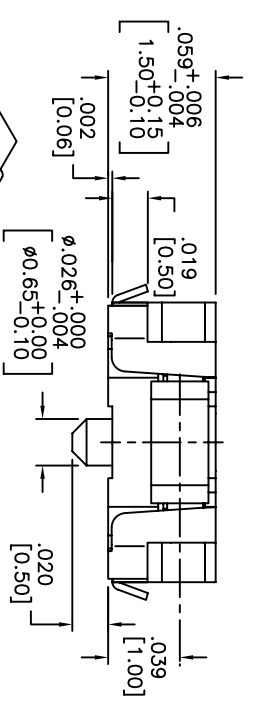
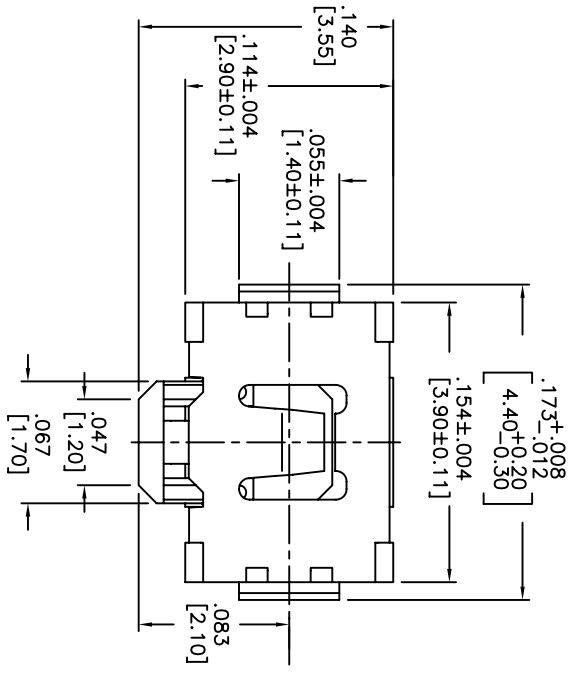
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DATE	SYM	REVISION RECORD	DWNL	CK
1/06	B	ECO# 526	CD	PD
5/08	C	ECO# 778	CD	PD



HATCHED AREA SHOWS SOLDERING LAND



DESCRIPTION: SIDE PUSH MECHANICAL CONTACT SWITCH, WITH BENDING AND GROUNDING TERMINALS.

SPECIFICATIONS:

OPERATION FORCE: 220± 65gf

OPERATION TEMP.: -25°C TO +70°C.

STORAGE TEMP.: -30°C TO +80°C.

ELECTRICAL LIFE: 100,000 CYCLES.

RATING: 50mA, 12VDC.

VIBRATION RESISTANCE: PASSES METHOD 201A MIL-STD-202F

SHOCK RESISTANCE: 50G PER METHOD 213B MIL-STD-202F

CONTACT RESISTANCE: 100MΩ MAX.

INSULATION RESISTANCE: 100MΩ MIN. AT 100VDC.

DIELECTRIC STRENGTH: 100VAC/1 MINUTE.

CONTACT ARRANGEMENT: 1 POLE 1 THROW.

STROKE: .008 ±.002 [0.2 ±0.05]

MATERIALS:

COVER: STAINLESS STEEL

BASE: LCP HIGH-TEMP. THERMOPLASTIC. COLOR: WHITE.

STEM: LCP HIGH-TEMP. THERMOPLASTIC. COLOR: BLACK.

CONTACT DISK: STAINLESS STEEL WITH SILVER CLADDING

TERMINAL: BRASS WITH SILVER PLATING

TAPE: TEFLON.

TAPE & REEL PACKAGING, 3500 PER REEL

HAND SOLDERING: 30 WATT IRON AT 320°C FOR 2 SECONDS

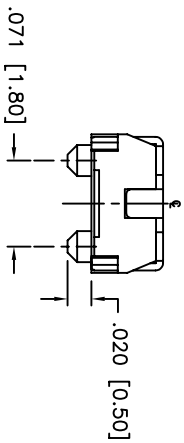
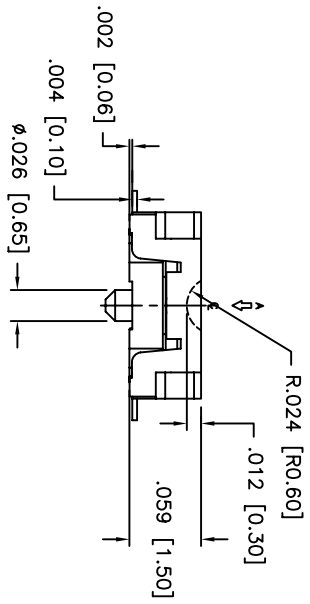
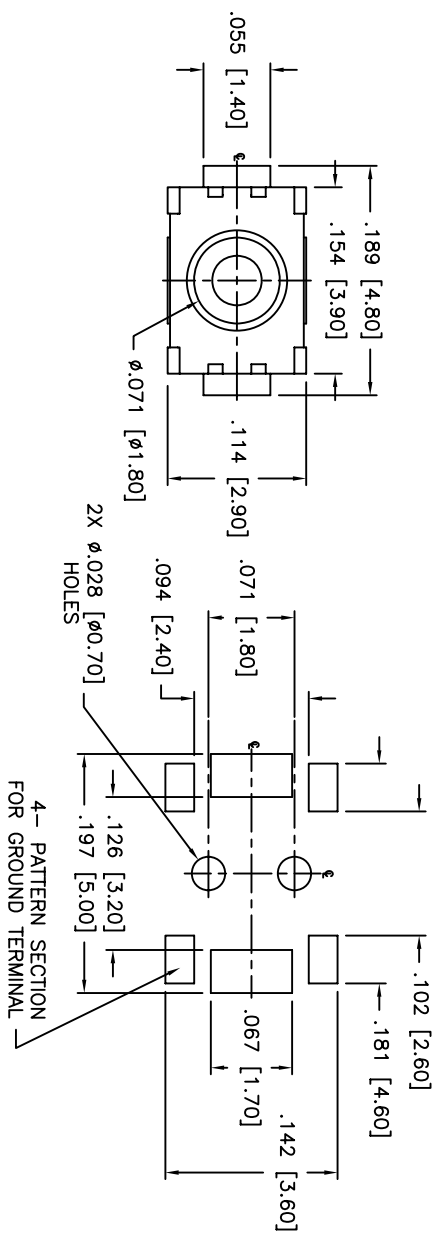
IR REFLOW: 240°C MAX

ROHS COMPLIANT

DESIGNER'S INITIAL	DATE	NO. OF SHEETS	SCALE	THIRD ANGLE PROJECTION
APDM	06/30/05	1 OF 1	15:1	AMPTCLGVTR
DESIGNER'S NAME	DATE	SHEET	SCALE	THIRD ANGLE PROJECTION
APDM	06/30/05	1 OF 1	15:1	AMPTCLGVTR
DESIGNER'S NAME	DATE	SHEET	SCALE	THIRD ANGLE PROJECTION
APDM	06/30/05	1 OF 1	15:1	AMPTCLGVTR

NO. OF SHEETS	DATE	SCALE	THIRD ANGLE PROJECTION
1 OF 1	06/30/05	15:1	AMPTCLGVTR

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UNLESS OTHERWISE SPECIFIED
P.C. TOLERANCES ARE ±.002 [0.05]

P.C. LAYOUT

4- PATTERN SECTION
FOR GROUND TERMINAL

DATE	SYM	REVISION RECORD	DWN.	CK.
1/06	A	ECO # 526	CD	PD
5/08	B	ECO# 778	CD	PD

DESCRIPTION: SPST, NORMALLY OPEN, MOMENTARY,
SURFACE MOUNT TACT SWITCH WITH LOCATING
PINS

SPECIFICATIONS:

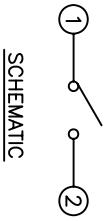
CONTACT RATING: 50mA @ 12VDC
INITIAL CONTACT RESISTANCE: 100MOHMS MAX.
INSULATION RESISTANCE: 100MOHMS MIN. @ 500VDC
DIELECTRIC STRENGTH: 100VAC FOR 1 MINUTE
ELECTRICAL LIFE: 200,000 CYCLES MIN.
OPERATING TEMPERATURE RANGE: -25°C to +70°C
STOP STRENGTH: MAX 3kgf VERTICAL STATIC LOAD
CONT. FOR 15 SEC.

ACTUATION FORCE: 160± 50gf
STORAGE TEMPERATURE RANGE: -30°C TO +80°C
SHOCK RESISTANCE: 50G PER METHOD 213B, MIL-STD-202F
VIBRATION RESISTANCE: PASSES METHOD 201A, MIL-STD-202F

SOLDERING:
IR REFLOW: 240°C MAX.
HAND SOLDERING: 350°C MAX. FOR 3 SECONDS MAX.
(30 WATT IRON MAX.)

MATERIALS:
BASE: LCP HIGH-TEMP THERMOPLASTIC UL94V-0
ACTUATOR: LCP HIGH-TEMP THERMOPLASTIC UL94V-0
COVER: STAINLESS STEEL
TERMINALS: SILVER PLATED BRASS
SHORTING CONTACT: STAINLESS STEEL WITH SILVER CLADDING
TAPE: TEFLON
ROHS COMPLIANT

NOTE:
1. AFTER SOLDERING, RETURN SWITCHES TO NORMAL
TEMPERATURE BEFORE WASHING.

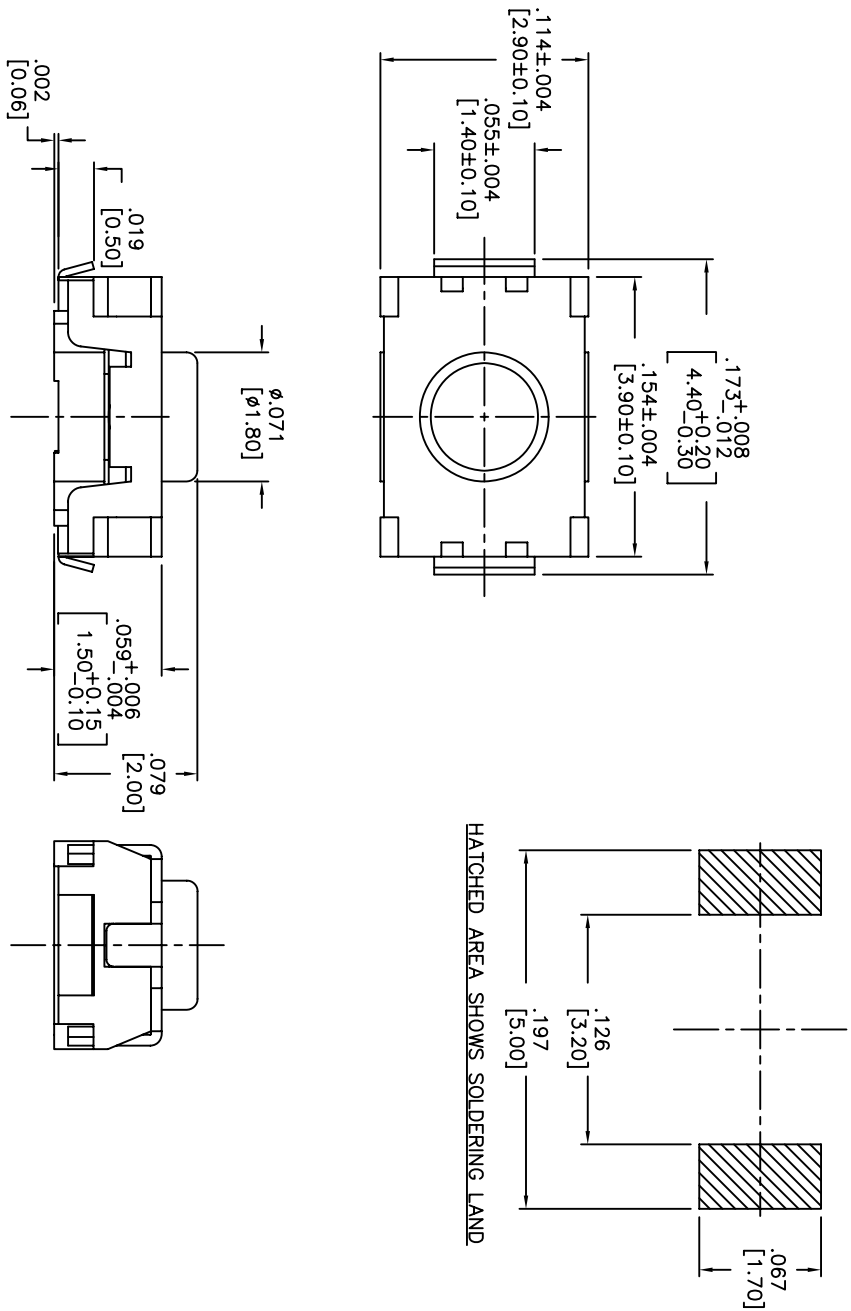


SCHEMATIC

Q.A. INSECT: 		DESIGNER'S INITIAL DIMENSION		APDM 63 Neck Rd. Haverhill, MA 01830 Telephone: 978-372-3534 Fax: 978-372-3534		DRN. CJD BR: PJD CR: PJD	
TOLERANCES (UNLESS AS NOTED) .XX=±.02[0.5] .XXX=±.008[0.20] .XXXX=±.0008[0.02] ANGLE = 40.5°		TITLE TACT SWITCH WITH LOCATING PINS		SHEET 1 OF 1		SIZE B	
DO NOT SCALE DRAWING		DATE 07/20/05		SCALE 10:1		DRAWING NO. AMPTCFGP1VTR	
				THIRD ANGLE PROJECTION 		REV B	

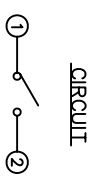
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P.C.B. LAYOUT



DATE	SYM	REVISION RECORD	DWN.	CK.
1/06	A	ECO# 526	CD	PD
5/08	B	ECO# 778	CD	PD

DESCRIPTION: VERTICAL PUSH MECHANICAL CONTACT SWITCH.
 SPECIFICATIONS:
 OPERATION FORCE: 220 ± 65gf
 OPERATION TEMP.: -25°C TO +70°C.
 STORAGE TEMP.: -30°C TO +80°C.
 ELECTRICAL LIFE: 200,000 CYCLES.
 RATING: 50mA, 12VDC.
 VIBRATION RESISTANCE: PASSES METHOD 201A
 MIL-STD-202F
 SHOCK RESISTANCE: 50G PER METHOD 213B
 MIL-STD-202F
 CONTACT RESISTANCE: 100mΩ MAX.
 INSULATION RESISTANCE: 100MΩ MIN. AT 100VDC.
 DIELECTRIC STRENGTH: 100VAC/1 MINUTE.
 CONTACT ARRANGEMENT: 1 POLE 1 THROW.
 MATERIALS:
 COVER: STAINLESS STEEL
 BASE: LCP HIGH-TEMP. THERMOPLASTIC.
 COLOR, WHITE.
 STEM: LCP HIGH-TEMP. THERMOPLASTIC.
 COLOR, BLACK.
 CONTACT DISK: STAINLESS STEEL
 WITH SILVER CLADDING
 TERMINAL: BRASS WITH SILVER PLATING
 TAPE & REEL PACKAGING, 2,000 PER REEL
 SOLDERING:
 HAND SOLDERING: 30 WATT IRON AT 320°C FOR 2 SECONDS
 IR REFLOW: 240°C MAX
 ROHS COMPLIANT
 LEAD FREE PROCESS COMPATIBLE

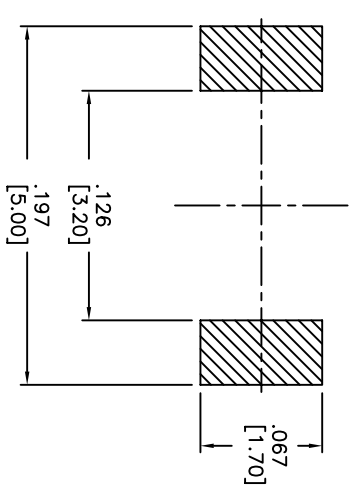
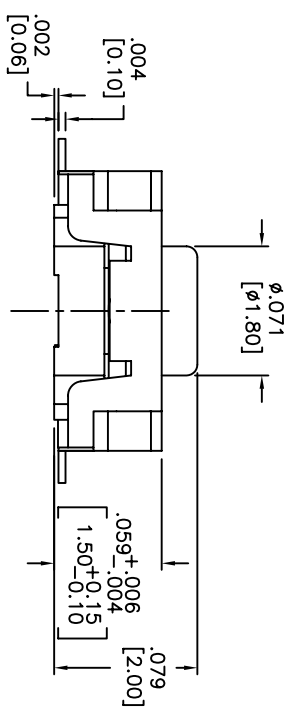
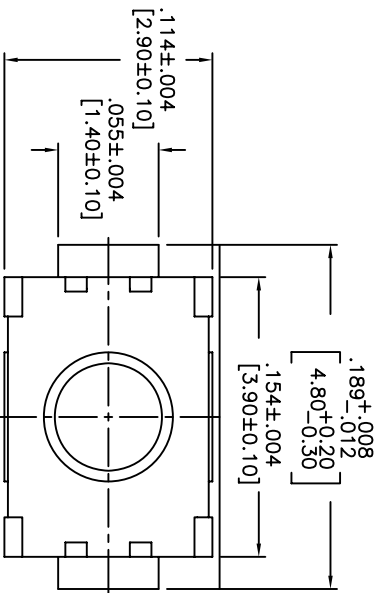


DESIGNER'S INITIALS		DRAFTER'S INITIALS		DATE	
APEN		APEN		01/23/06	
TOLERANCES (UNLESS OTHERWISE SPECIFIED)		SCALE		DRAWING NO.	
.XX = ±.002 [0.05]		15:1		AMPTLP2VTR	
.XXX = ±.0008 [0.20]		THIRD ANGLE PROJECTION		REV	
.XXXX = ±.0008 [0.02]		ANGLE = 30.5°		B	

1 2 3 4 5 6 7 8

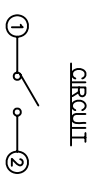
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P.C.B. LAYOUT



HATCHED AREA SHOWS SOLDERING LAND

DESCRIPTION: VERTICAL PUSH MECHANICAL CONTACT SWITCH.
 SPECIFICATIONS:
 OPERATION FORCE: 160± 50gf
 OPERATION TEMP.: -25°C TO +70°C.
 STORAGE TEMP.: -30°C TO +80°C.
 ELECTRICAL LIFE: 200,000 CYCLES.
 RATING: 50mA, 12VDC.
 VIBRATION RESISTANCE: PASSES METHOD 201A
 MIL-STD-202F
 SHOCK RESISTANCE: 50G PER METHOD 213B
 MIL-STD-202F
 CONTACT RESISTANCE: 100mΩ MAX.
 INSULATION RESISTANCE: 100MΩ MIN. AT 100VDC.
 DIELECTRIC STRENGTH: 100VAC/1 MINUTE.
 CONTACT ARRANGEMENT: 1 POLE 1 THROW.
 MATERIALS:
 COVER: STAINLESS STEEL
 BASE: LCP HIGH-TEMP. THERMOPLASTIC.
 COLOR, WHITE.
 STEM: LCP HIGH-TEMP. THERMOPLASTIC.
 COLOR, BLACK.
 CONTACT DISK: STAINLESS STEEL WITH SILVER CLADDING
 TERMINAL: BRASS WITH SILVER PLATING
 TAPE: TEFLON.
 TAPE & REEL PACKAGING, 2,000 PER REEL
 SOLDERING:
 HAND SOLDERING: 30 WATT IRON AT 320°C FOR 2 SECONDS
 IR REFLOW: 260°C MAX
 RoHS COMPLIANT
 LEAD FREE PROCESS COMPATIBLE



DATE	SYM	REVISION RECORD	DWN.	CK.
5/08	B	ECO# 778	CD	PD

Q.A. INSPECT: DESIGNATES CRITICAL DIMENSION

APDM
 63 Neck Rd.
 Hendersonville, NC 27539
 Phone: 704-772-5554
 Fax: 704-772-5554

DESIGNER: PJD
 BR: PJD
 DRN: CJD

TOLERANCES (UNLESS OTHERWISE SPECIFIED)
 .XX = ±.02 [0.5]
 .XXX = ±.008 [0.20]
 .XXXX = ±.0008 [0.02]
 ANGLE = 30.5°

DO NOT SCALE

DATE: 01/23/06
 DRAWING NO.: AMPPTFP2VTR
 REV: B

TITLE: TACT SWITCH

SHEET: 1 OF 1
 SIZE: B
 SCALE: 15:1
 THIRD ANGLE PROJECTION

1 2 3 4 5 6 7 8