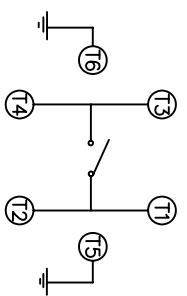
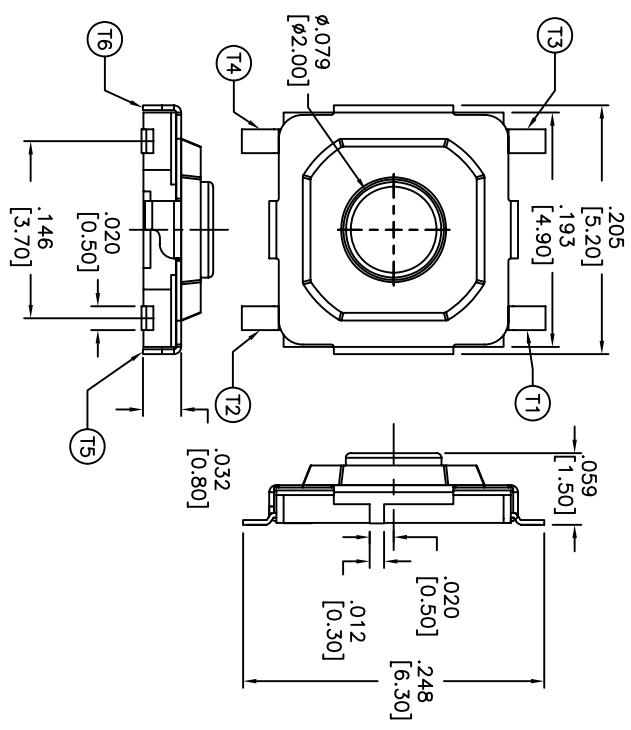
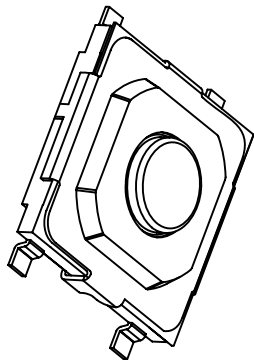
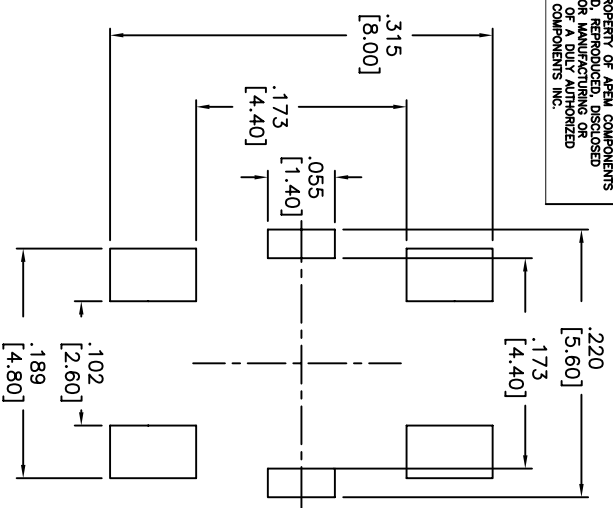


THIS DOCUMENT IS THE PROPERTY OF APEN COMPONENTS AND SHALL NOT BE COPIED, REPRODUCED, DISCLOSED OR USED AS THE BASIS FOR MANUFACTURING OR SALE WITHOUT PERMISSION OF A DULY AUTHORIZED REPRESENTATIVE OF APEN COMPONENTS INC.

ATMG53*V*
 OPERATION FORCE: _____
 3=160gf
 4=260gf
 PACKAGE STYLE:
 T/R=TAPE AND REEL
 LEAD FREE



CIRCUIT DIAGRAM

DATE	SYM	REVISION RECORD	DWN.	CK.
11/05	B	ECO# 495	CD	

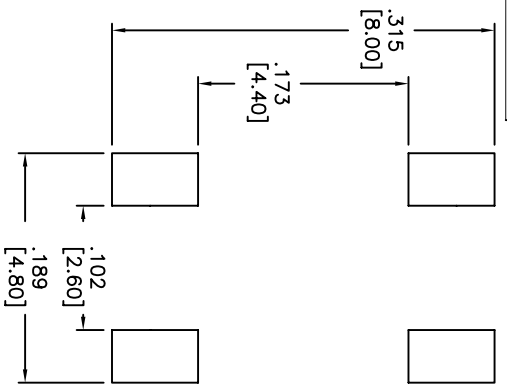
DESCRIPTION: MINIATURE MACHANICAL CONTACT SWITCH WITH SURFACE MOUNT TERMINALS AND GROUNDING TERMINALS.
 SPECIFICATIONS:
 STROKE: .010 \pm .004 [0.25 \pm 0.10]
 OPERATION TEMPERATURE RANGE: -25°C TO +70°C
 STORAGE TEMPERATURE RANGE: -30°C TO +80°C
 VIBRATION TEST: PASSES METHOD 201A MIL-STD-202F.
 SHOCK TEST: 50G PER METHOD 213B MIL-STD202F.
 ELECTRICAL LIFE: 1,000,000 CYCLES MIN FOR 160gf.
 200,000 CYCLES MIN FOR 260gf.
 RATING: 50mA, 12VDC.
 CONTACT RESISTANCE: 100mΩ MAX.
 INSULATION RESISTANCE: 100MΩ MIN. AT 500VDC.
 DIELECTRIC STRENGTH: 250VAC/1 MINUTE.
 CONTACT ARRANGEMENT: 1POLE 1 THROW.
 MATERIALS:
 COVER: NICKEL SILVER.
 BASE: HIGH-TEMP. THERMOPLASTIC.
 COLOR: BLACK.
 STEM: BRASS WITH NICKEL PLATING
 CONTACT DISC: STAINLESS STEEL.
 TERMINAL: BRASS WITH SILVER CLADDING.
 TAPE: TEFLON
 SOLDERING:
 HAND SOLDERING: 30 WATT IRON AT 350°C FOR 5 SEC.
 VAPOR & REFLOW: 255°C FOR 5 SEC. MAX.
 NON-WASHABLE
 LEAD FREE PROCESS COMPATIBLE
 ROHS COMPLIANT

APEN APEN COMPONENTS, INC. 63 Nork Rd. Hawthorne, NJ 07035 Phone: 973-772-5554 Fax: 973-772-5554		DPN: CJD BR: PJD
DESIGNS: OPTICAL DIMENSION TOLERANCES (UNLESS OTHERWISE SPECIFIED) .XX = ±0.005 .XXX = ±0.004 [0.20] .XXXX = ±0.0008 [0.02] ANGLE = 30.5°	SHEET 1 OF 1 SIZE B SCALE 10:1 THIRD ANGLE PROJECTION	TITLE MECHANICAL CONTACT SWITCH
DO NOT SCALE DIMENSIONS DATE: 08/15/05 DRAWING NO: ATMG53*V*		REV: B

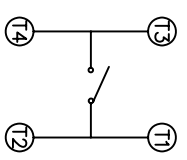
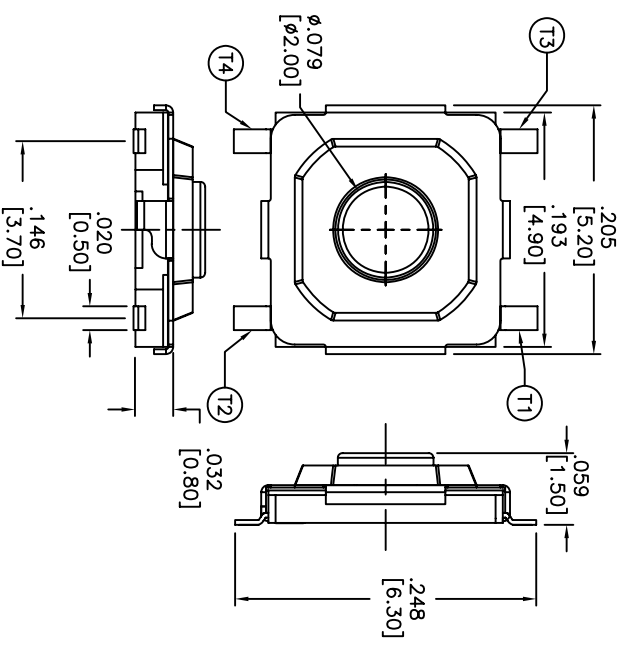
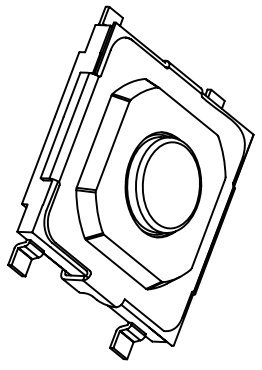
THIS DOCUMENT IS THE PROPERTY OF APEM COMPONENTS AND SHALL NOT BE COPIED, REPRODUCED, DISCLOSED OR USED AS THE BASIS FOR MANUFACTURING OR SALE WITHOUT PERMISSION OF A DULY AUTHORIZED REPRESENTATIVE OF APEM COMPONENTS INC.

OPERATION FORCE: ATM53*V*
 2=100gf
 3=160gf
 4=260gf

PACKAGE STYLE:
 T/R=TAPE AND REEL
 LEAD FREE



P.C.B. LAYOUT



CIRCUIT DIAGRAM

DATE	SYM	REVISION RECORD	DWN.	CK.

DESCRIPTION: MINIATURE MECHANICAL CONTACT SWITCH SURFACE MOUNT TERMINALS.

SPECIFICATIONS:

STROKE: .010 \pm .004 \pm .006 [0.25 \pm 0.10 \pm 0.15]

OPERATION TEMPERATURE RANGE: -25°C TO +70°C

STORAGE TEMPERATURE RANGE: -30°C TO +80°C

VIBRATION TEST: PASSES METHOD 201A MIL-STD-202F.

SHOCK TEST: 50G PER METHOD 213B MIL-STD202F.

ELECTRICAL LIFE: 1,000,000 CYCLES MIN FOR 100gf, 16 200,000 CYCLES MIN FOR 260gf.

RATING: 50mA, 12VDC.

CONTACT RESISTANCE: 100mΩ MAX.

INSULATION RESISTANCE: 100MΩ MIN. AT 500VDC.

DIELECTRIC STRENGTH: 250VAC/1 MINUTE.

CONTACT ARRANGEMENT: 1POLE 1 THROW.

MATERIALS:

COVER: NICKEL SILVER.

BASE: HIGH-TEMP. THERMOPLASTIC.

COLOR: BLACK.

STEM: BRASS WITH NICKEL PLATING

CONTACT DISC: STAINLESS STEEL WITH SILVER PLATING.

TERMINAL: BRASS WITH SILVER CLADDING.

TAPE: TEFLON

SOLDERING:

HAND SOLDERING: 30 WATT IRON AT 350°C FOR 5 SEC VAPOR & REFLOW: 255°C FOR 5 SEC. MAX.

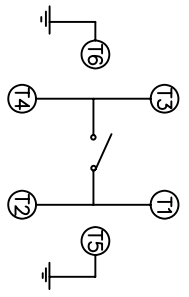
NON-WASHABLE

LEAD FREE PROCESS COMPATIBLE

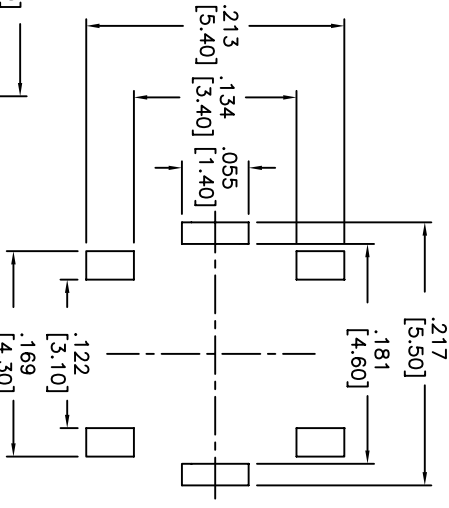
ROHS COMPLIANT

APM APEM COMPONENTS INC. 63 NACK RD. HERRINGHAM, MA 01835 TEL: 978-372-5554 FAX: 978-372-5554		DPN: CJD BR: PJD
DESIGNS: OPTICAL DIMENSION TOLERANCES (UNLESS OTHERWISE SPECIFIED) .XX = ±.02 [0.05] .XXX = ±.008 [0.20] .XXXX = ±.0008 [0.02] ANGLE = 30.5°	SHEET 1 OF 1 SIZE B SCALE 10:1 THIRD ANGLE PROJECTION	TITLE MECHANICAL CONTACT SWITCH
DO NOT SCALE DRAWING DATE: 4/26/06 DRAWING NO: ATM53*V*	REV: A	REV: A

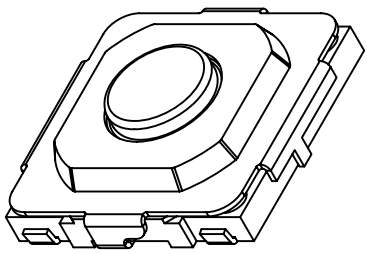
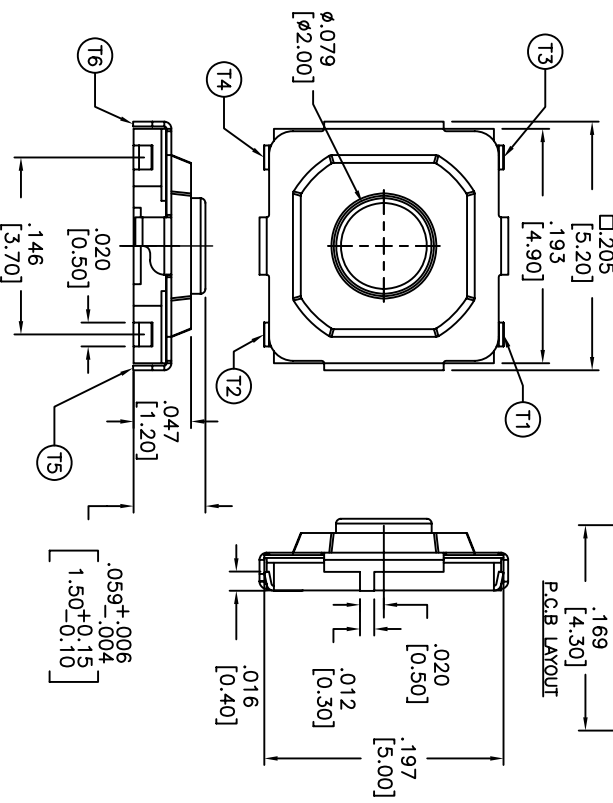
THIS DOCUMENT IS THE PROPERTY OF APEM COMPONENTS AND SHALL NOT BE COPIED, REPRODUCED, DISCLOSED OR SALE WITHOUT PERMISSION OF A DULY AUTHORIZED REPRESENTATIVE OF APEM COMPONENTS INC.



CIRCUIT DIAGRAM



PCB LAYOUT



OPERATION FORCE: ATUG53*V*
 3=160gf
 4=260gf

PACKAGE STYLE:
 T/R=TAPE AND REEL
 LEAD FREE

DESCRIPTION: MINIATURE MECHANICAL CONTACT SWITCH WITH "S" TYPE SMT AND GROUNDING TERMINALS.

SPECIFICATIONS:

OPERATION TEMPERATURE RANGE: -25°C TO +70°C
 STORAGE TEMPERATURE RANGE: -30°C TO +80°C
 VIBRATION TEST: PASSES METHOD 201A
 MIL-STD-202F.
 SHOCK TEST: 50G PER METHOD 213B MIL-STD202F.
 ELECTRICAL LIFE: 1,000,000 CYCLES MIN FOR 160gf.
 200,000 CYCLES MIN FOR 260gf.

RATING: 50mA, 12VDC.
 CONTACT RESISTANCE: 100mΩ MAX.
 INSULATION RESISTANCE: 100MΩ MIN. AT 500VDC.
 DIELECTRIC STRENGTH: 250VAC/1 MINUTE.
 STROKE: 0.25 ±0.10mm
 CONTACT ARRANGEMENT: 1POLE 1 THROW.

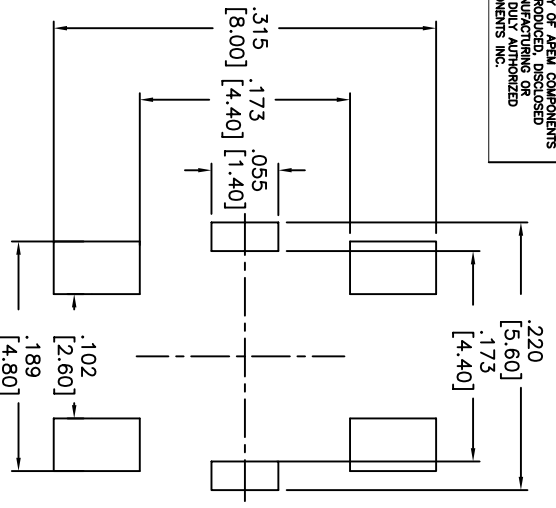
MATERIALS:
 COVER: NICKEL SILVER.
 BASE: HIGH-TEMP. THERMOPLASTIC.
 COLOR: BLACK.
 STEM: BRASS WITH NICKEL PLATING
 CONTACT DISC: STAINLESS STEEL.
 TERMINAL: BRASS WITH SILVER CLADDING.
 TAPE: TEFLON

SOLDERING:
 HAND SOLDERING: 30 WATT IRON AT 350°C FOR 5 SEC.
 IR REFLOW: 225°C MAX.
 LEAD FREE PROCESS COMPATIBLE
 ROHS COMPLIANT

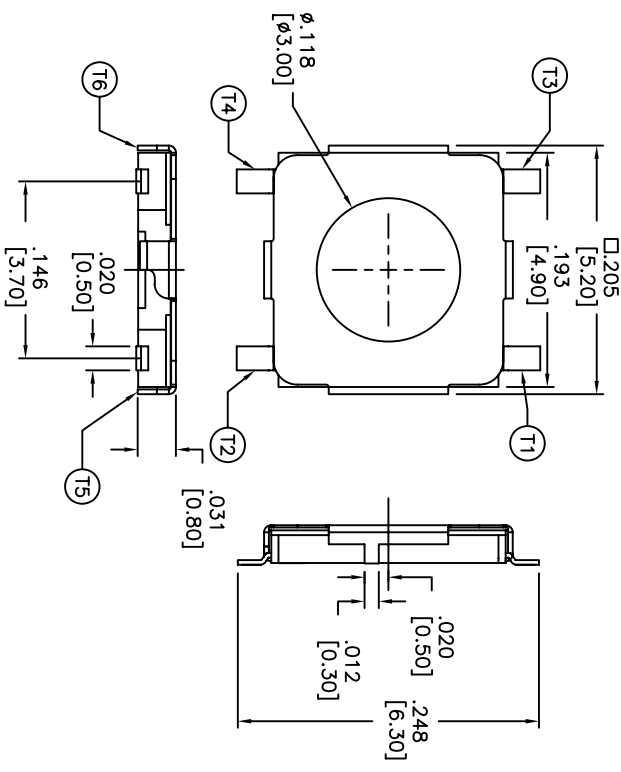
DATE	SYM	REVISION RECORD	DWN.	CK.

9A. INSPECT: DIMENSIONS CRITICAL TOLERANCES (UNLESS OTHERWISE SPECIFIED) .XX = ±0.02 [0.05] .XXX = ±0.008 [0.20] .XXXX = ±0.0008 [0.02] ANGLE = 30.5°		APPEM 63 Neck Rd. Haverhill, MA 01830 Phone: 978-372-5554 Fax: 978-372-5554	PPN: CJD BR: OK: PJD
TITLE MECHANICAL CONTACT SWITCH	SHEET 1 OF 1 SIZE B SCALE 10:1	THIRD ANGLE PROJECTION 	DO NOT SCALE DATE: 8/11/05 DRAWING NO: ATUG53*V* REV: A

THIS DOCUMENT IS THE PROPERTY OF APM COMPONENTS AND SHALL NOT BE COPIED, REPRODUCED, DISCLOSED OR SALE WITHOUT PERMISSION OF A DULY AUTHORIZED REPRESENTATIVE OF APM COMPONENTS INC.

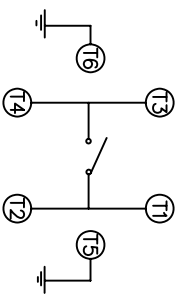
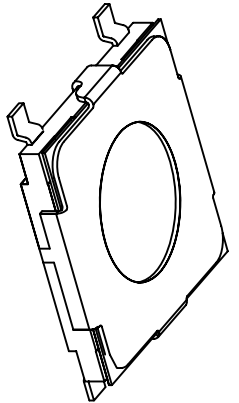


P.C.B. LAYOUT
UNLESS OTHERWISE SPECIFIED
ALL P.C. TOLERANCES ARE ±.002 [0.05]



OPERATION FORCE: ATMG52*V*
2=100gf
3=160gf
4=260gf

PACKAGE STYLE:
T/R=TAPE AND REEL
LEAD FREE



CIRCUIT DIAGRAM

DESCRIPTION: MINIATURE MECHANICAL CONTACT SWITCH WITH SMT, AND GROUNDING TERMINALS.

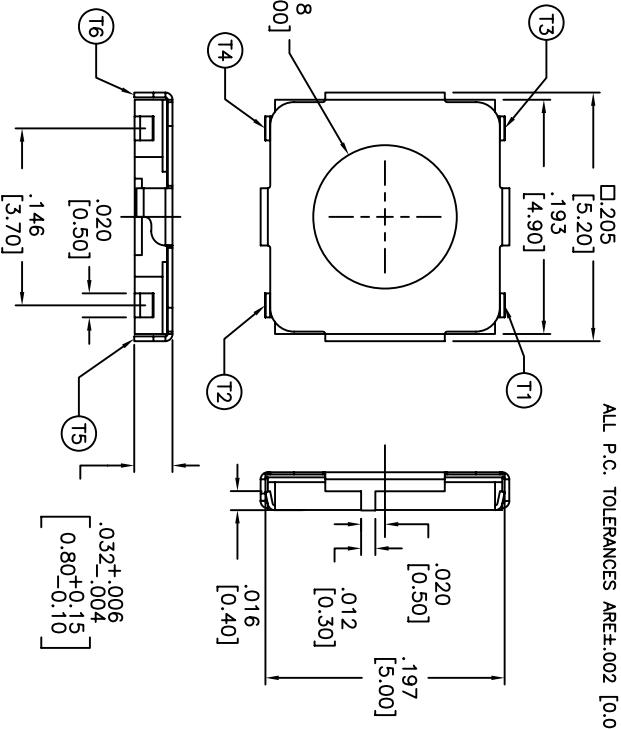
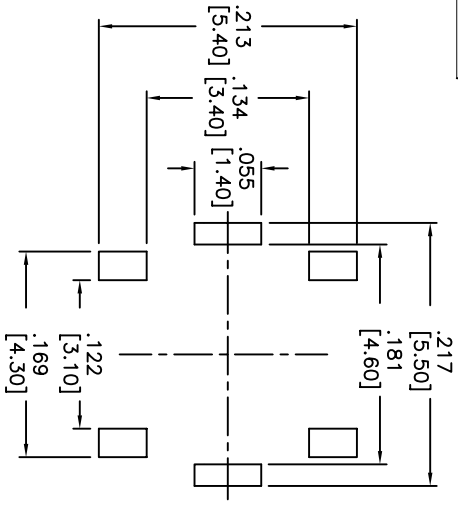
SPECIFICATIONS:
OPERATION TEMPERATURE RANGE: -25°C TO +70°C
STORAGE TEMPERATURE RANGE: -30°C TO +80°C
VIBRATION TEST: PASSES METHOD 2014 MIL-STD-202F.
SHOCK TEST: 50G PER METHOD 213B MIL-STD202F.
ELECTRICAL LIFE: 1,000,000 CYCLES MIN FOR 100gf AND 160gf.
200,000 CYCLES MIN FOR 260gf.

RATING: 50mA, 12VDC.
CONTACT RESISTANCE: 100mΩ MAX.
INSULATION RESISTANCE: 100MΩ MIN. AT 500VDC.
DIELECTRIC STRENGTH: 250VAC/1 MINUTE.
CONTACT ARRANGEMENT: 1POLE 1 THROW.
MATERIALS:
COVER: NICKEL SILVER.
BASE: HIGH-TEMP. THERMOPLASTIC.
COLOR: BLACK.
STEM: BRASS WITH NICKEL PLATING
CONTACT DISC: STAINLESS STEEL WITH SILVER CLADDING.
TERMINAL: BRASS WITH SILVER PLATING.
TAPE: TEFLON
SOLDERING:
HAND SOLDERING: 30 WATT IRON AT 350°C FOR 5 SEC.
IR REFLOW: 260°C MAX
LEAD FREE PROCESS COMPATIBLE
ROHS COMPLIANT

DATE	SYM	REVISION RECORD	DWN.	CK.

Q.A. INSPECT: 		DESIGNATES CRITICAL DIMENSION			
TOLERANCES (UNLESS OTHERWISE SPECIFIED) .XX=±.02[0.05] .XXX=±.008[0.20] .XXXX=±.0008[0.02] ANGLE = 40.5°		APM APM COMPONENTS INC. 63 NACK RD. THORNTON, MA 01559 TEL: 508-772-5554 FAX: 508-772-5554		PPN: CJD BR: PJD THIRD ANGLE PROJECTION	
TITLE MECHANICAL CONTACT SWITCH	SHEET 1 OF 1	SIZE B	SCALE 10:1	DATE 8/15/05	DRAWING NO. ATMG52*V*
DO NOT SCALE DIMENSIONS	REV A				

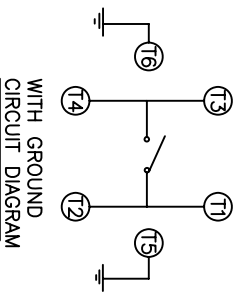
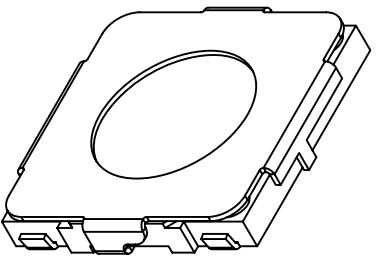
THIS DOCUMENT IS THE PROPERTY OF APEN COMPONENTS AND SHALL NOT BE COPIED, REPRODUCED, DISCLOSED OR USED AS THE BASIS FOR MANUFACTURING OR SALE WITHOUT PERMISSION OF A DULY AUTHORIZED REPRESENTATIVE OF APEN COMPONENTS INC.



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

OPERATION FORCE: ATUG52**V*
2=100gf
3=160gf
4=260gf

PACKAGE STYLE:
T/R=TAPE AND REEL
LEAD FREE



DESCRIPTION: MINIATURE MECHANICAL CONTACT SWITCH WITH J TYPE SMT AND GROUNDING TERMINALS.

SPECIFICATIONS:
OPERATION TEMPERATURE RANGE: -25°C TO +70°C
STORAGE TEMPERATURE RANGE: -30°C TO +80°C
VIBRATION TEST: PASSES METHOD 201A MIL-STD-202F.
SHOCK TEST: 50G PER METHOD 213B MIL-STD202F.
ELECTRICAL LIFE: 1,000,000 CYCLES MIN FOR 100gf 160gf.
200,000 CYCLES MIN FOR 260gf.
RATING: 50mA, 12VDC.
CONTACT RESISTANCE: 100mΩ MAX.
INSULATION RESISTANCE: 100MΩ MIN. AT 500VDC.
DIELECTRIC STRENGTH: 250VAC/1 MINUTE.
STROKE: 0.25 ±0.08mm
CONTACT ARRANGEMENT: 1POLE 1 THROW.

MATERIALS:
COVER: NICKEL SILVER.
BASE: HIGH-TEMP. THERMOPLASTIC.
COLOR: BLACK.
STEM: BRASS WITH NICKEL PLATING
CONTACT DISC: STAINLESS STEEL WITH SILVER CLADDING.
TERMINAL: BRASS WITH SILVER PLATING.
TAPE: TEFLON

SOLDERING:
HAND SOLDERING: 30 WATT IRON AT 350°C FOR 5 SEC.
IR REFLOW: 260°C MAX.
LEAD FREE PROCESS COMPATIBLE
ROHS COMPLIANT

DATE	SYM	REVISION RECORD	DWN.	CK.

Q.A. INSPECT:		63 Nark. Rd. 01835 Haverhill, MA 01835 APEN COMPONENTS, INC. Phone: 978-372-5554		DRN. CJD
DESIGNATES CRITICAL DIMENSION	APEN	DR. BR.	OR. PJD	THIRD ANGLE PROJECTION
TOLERANCES (UNLESS OTHERWISE SPECIFIED)	INCH	SHEET	SIZE	SCALE
.XX = ±.02 [0.05]	1	OF 1	B	10:1
.XXX = ±.008 [0.20]	MECHANICAL CONTACT SWITCH			
.XXXX = ±.0008 [0.02]	DATE: 8/11/06			
ANGLE = 30.5°	DRAWING NO. ATUG52**V*			
DO NOT SCALE DRAWING	REV. A			

Компания «Океан Электроники» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели, кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



Телефон: 8 (812) 309-75-97 (многоканальный)

Факс: 8 (812) 320-03-32

Электронная почта: ocean@oceanchips.ru

Web: <http://oceanchips.ru/>

Адрес: 198099, г. Санкт-Петербург, ул. Калинина, д. 2, корп. 4, лит. А