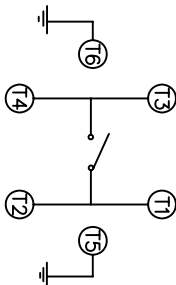
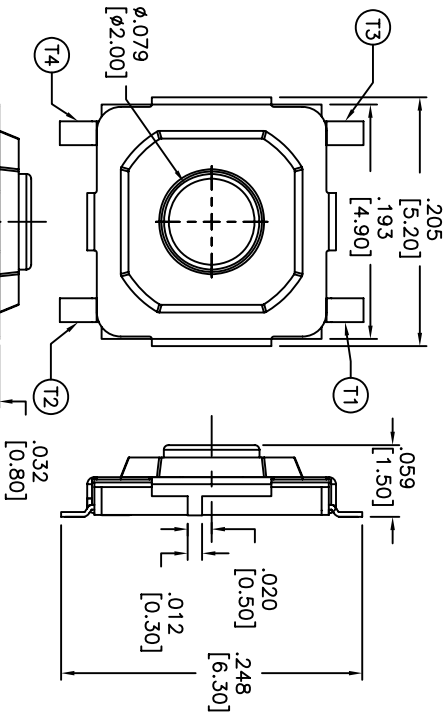
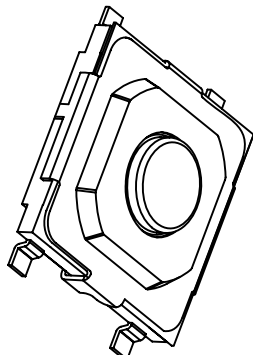
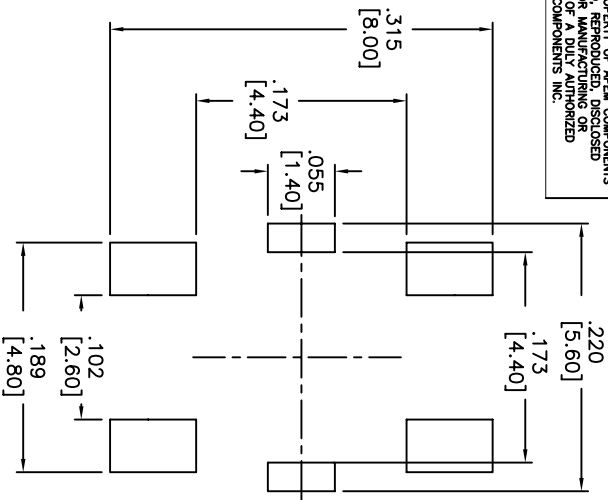


THIS DOCUMENT IS THE PROPERTY OF APEM COMPONENTS AND SHALL NOT BE COPIED, REPRODUCED, DISCLOSED OR USED AS THE BASIS FOR MANUFACTURING OR SALE WITHOUT PERMISSION OF A DULY AUTHORIZED REPRESENTATIVE OF APEM COMPONENTS INC.

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 $\pm .010$]

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

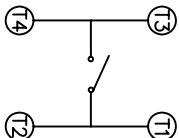
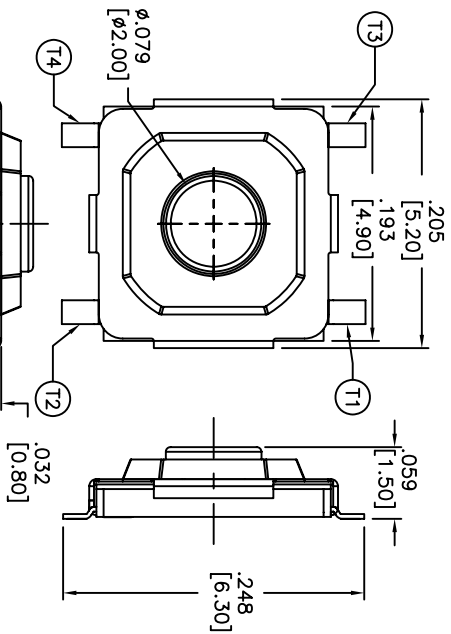
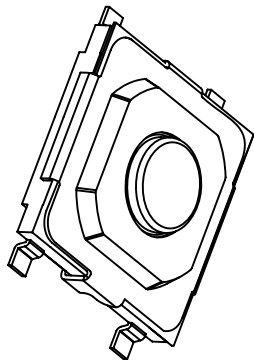
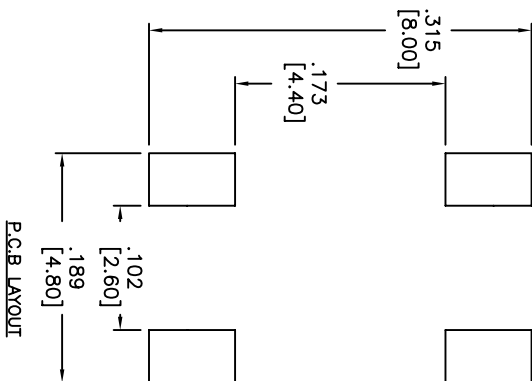
LEAD FREE PROCESS COMPATIBLE

RoHS COMPLANT

DESIGNATION		DIMENSION		TOLERANCES		TITLE		DATE		DRAWING NO.		REV	
APMG	63	11/15/05	11/15/05	11/15/05	11/15/05	MECHANICAL CONTACT SWITCH	MECHANICAL CONTACT SWITCH	08/15/05	08/15/05	ATMG53*V*	ATMG53*V*	B	B
APMG	63	11/15/05	11/15/05	11/15/05	11/15/05	MECHANICAL CONTACT SWITCH	MECHANICAL CONTACT SWITCH	08/15/05	08/15/05	ATMG53*V*	ATMG53*V*	B	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.

ATM53*V/*
PACKAGE STYLE:
2=100gf
3=160gf
4=260gf
T/R=TAPE AND REEL
LEAD FREE



CIRCUIT DIAGRAM

DESCRIPTION: MINIATURE MECHANICAL CONTACT SWITCH
SURFACE MOUNT TERMINALS.

SPECIFICATIONS:

STROKE: .010 $\pm .004$ [0.25 $\pm .01$]
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.

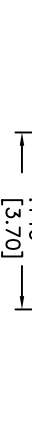
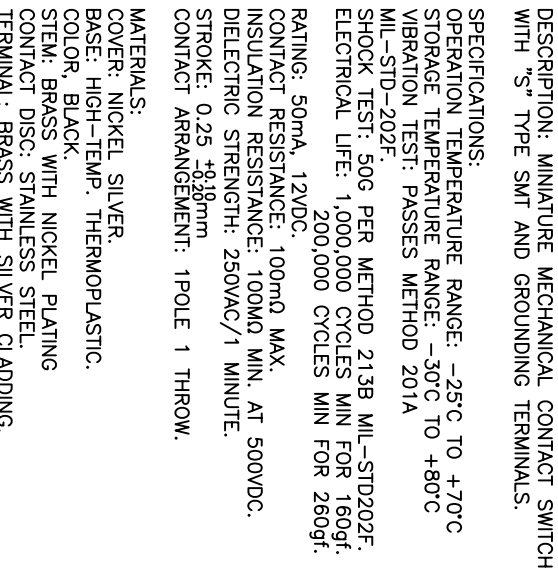
MATERIALS:


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

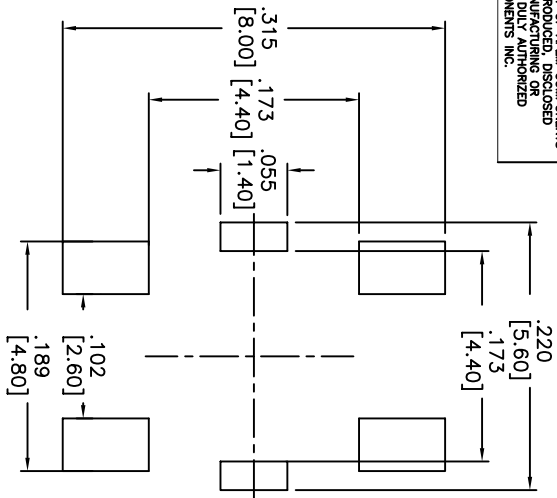
DATE	SYM	REVISION RECORD	DWN.	CK.

9A. INSECT.		63 Neck Rd.		DIN. CJD	
DESIGNATES CRITICAL		Haverhill, MA 01830		BR.	
DIMENSION		APEM		PJD	
TOLERANCES		1 OF 1		SIZE	
(UNLESS OTHERWISE SPECIFIED)		B		10:1	
.XX = ±.02 [0.05]		SCALE		THIRD ANGLE PROJECTION	
.XXX = ±.004 [0.20]		TITLE		MECHANICAL CONTACT SWITCH	
.XXXX = ±.0008 [0.02]		DATE		DRAWING NO.	
ANGLE = 10.5°		4/26/06		ATM53*V*	
DO NOT SCALE		REV		A	
DRAWING		7		8	

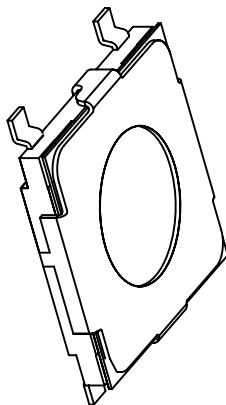


2A. INSPECT: Δ DESIGNATES CRITICAL DIMENSION				63. HOOVER RD. 01535 TEL: 978-372-1602 FAX: 978-372-5534		DRN. CJD BY: CHK. PJD BY:
TOLERANCES (except as noted) .XX" \pm .02 (.05) .XX" \pm .008 (.01) .XXXX \pm .0008 (.02) ANGLE = $\pm 0.5^\circ$		INCH (MM)	SHEET 1 OF 1	SIZE B	SCALE 10:1	THIRD ANGLE PROJECTION 
DATE 8/11/05 DO NOT SCALE DRAWING		DRAWING NO. ATJG53*V*		REV A		
TITLE MECHANICAL CONTACT SWITCH						

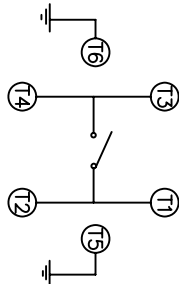
THIS DOCUMENT IS THE PROPERTY OF APEM COMPONENTS AND SHALL NOT BE COPIED, REPRODUCED, DISCLOSED OR USED AS THE BASIS FOR MANUFACTURING OR SALE WITHOUT PERMISSION OF A DULY AUTHORIZED REPRESENTATIVE OF APEM COMPONENTS INC.



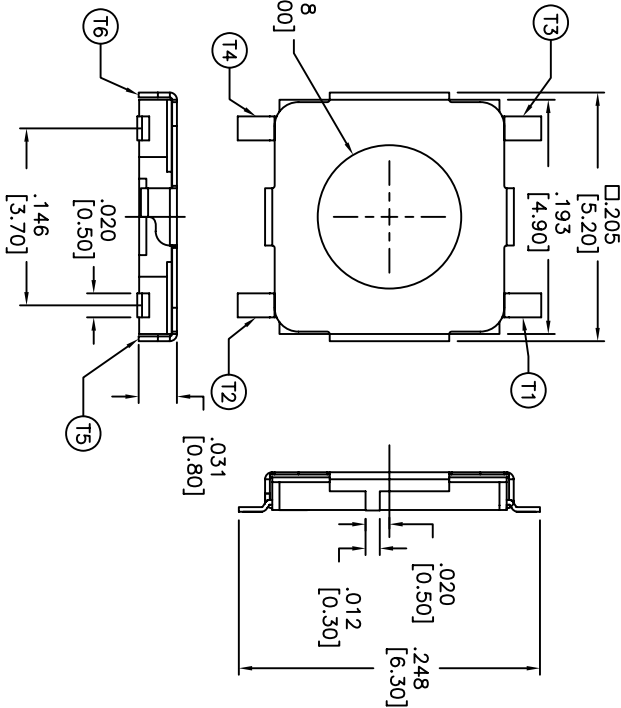
P.C.B. LAYOUT
UNLESS OTHERWISE SPECIFIED
ALL P.C. TOLERANCES ARE $\pm .002$ [0.05]



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.

STROKE: .010 $\pm .005$ [0.25 $\pm .013$]

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 AS NOTED) XXX=±.008[0.20] XXXX=±.0008[0.02] ANGLE = 40.5°		TITLE MECHANICAL CONTACT SWITCH		DATE 8/15/05		DRAWING NO. ATMG52*V*		REV A	
APEM		63 Neck Rd.		01835		P.D.		CJD							
APEM		Haverhill, MA		01835		P.D.		CJD							
APEM		Haverhill, MA		01835		P.D.		CJD							
APEM		Haverhill, MA		01835		P.D.		CJD							

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.

ATUG52**V*
OPERATION FORCE: _____
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:

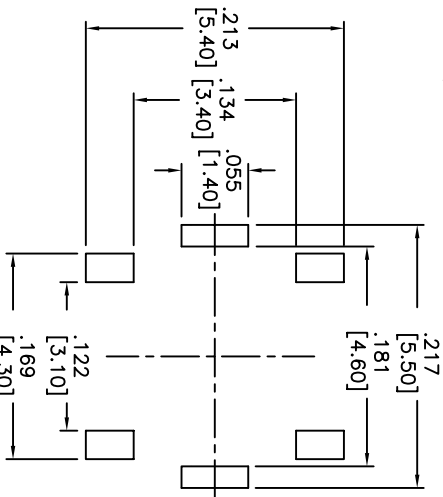
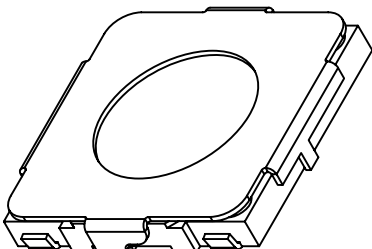
OPERATION TEMPERATURE RANGE: -25°C TO +70°C
STORAGE TEMPERATURE RANGE: -30°C TO +80°C
VIBRATION TEST: PASSES METHOD 213A MIL-STD-202F.
SHOCK TEST: 50G PER METHOD 213B MIL-STD202F.
ELECTRICAL LIFE: 1,000,000 CYCLES MIN FOR 100gf. 160gf. 200,000 CYCLES MIN FOR 260gf.
RATING: 50mA, 12VDC.
CONTACT RESISTANCE: 100mΩ MAX.
INSULATION RESISTANCE: 100MΩ MIN. AT 500VDC.
DIELECTRIC STRENGTH: 250VAC/1 MINUTE.
STROKE: 0.25 ±0.28mm
CONTACT ARRANGEMENT: 1POLE 1 THROW.

MATERIALS:

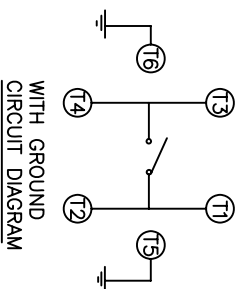
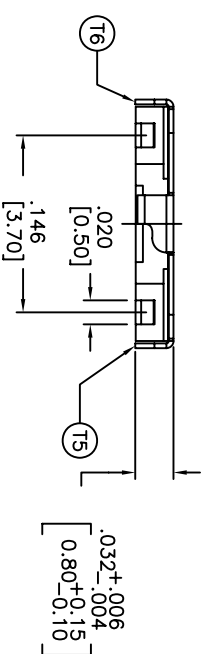
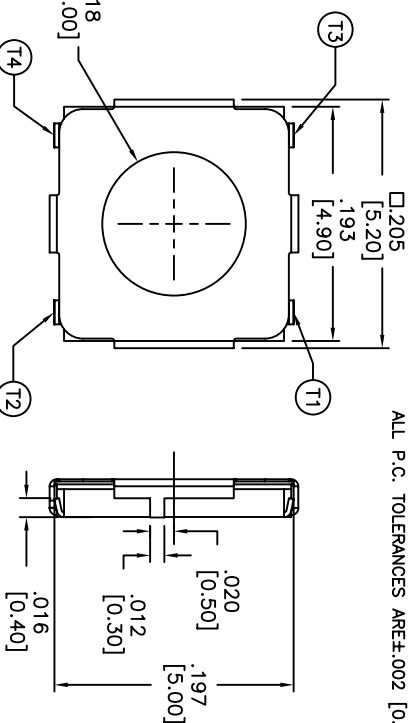
COVER: NICKEL SILVER.
BASE: HIGH-TEMP. THERMOPLASTIC.
COLOR, BLACK.
STEM: BRASS WITH NICKEL PLATING
CONTACT DISC: STAINLESS STEEL WITH SILVER CLADDING.
TERMINAL: BRASS WITH SILVER PLATING.
TAPE: TEFLON

SOLDERING:

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



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



WITH GROUND
CIRCUIT DIAGRAM

DATE	SYM	REVISION	RECORD	DWN.	CK.

Q.A. INSPECT.		DESIGNATION		TOLERANCES (UNLESS OTHERWISE SPECIFIED)		TITLE		DATE		DRAWING NO.		REV.	
APEM		63 NICK. RD. 01835 HUNTSVILLE, AL 35894 FAX 256-372-3534		.001±.0008 [0.02] .002±.0008 [0.02] .005±.0008 [0.02] ANGLE = 40.5°		MECHANICAL CONTACT SWITCH		8/11/06		ATUG52**V*		A	

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

[Apem:](#)

[ATJG523VTR](#) [ATJG524VTR](#) [ATJG533VTR](#) [ATJG534VTR](#) [ATM523VTR](#) [ATM524VTR](#) [ATM533VTR](#) [ATM534VTR](#)
[ATMG325NVTR](#) [ATMG523VTR](#) [ATMG524VTR](#) [ATMG533VTR](#) [ATMG534VTR](#)