

# MICRO SWITCH

FED. MFG. CODE 91929

# SOLID STATE SENSOR

## CATALOG LISTING 2SS52M SERIES CHART 1

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2SS52M SERIES CHART 1  
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ISSUE  
3

REVISIONS

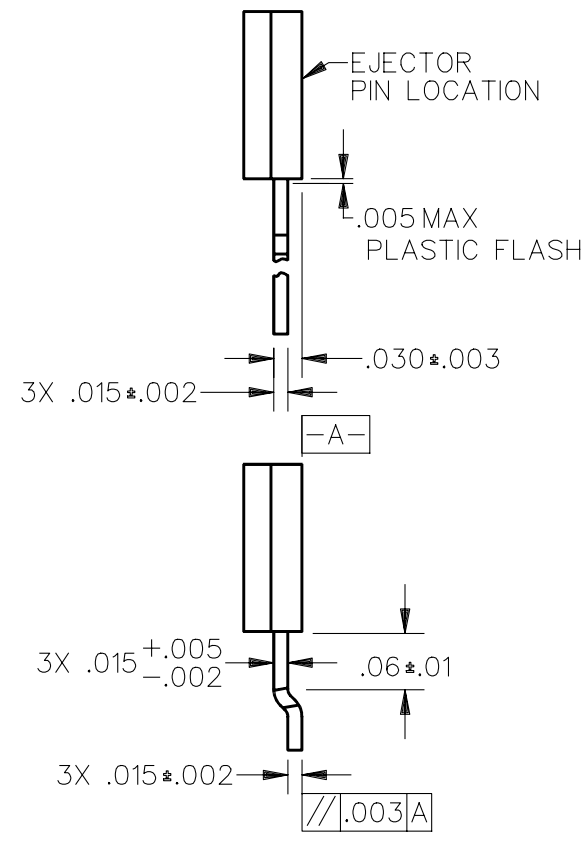
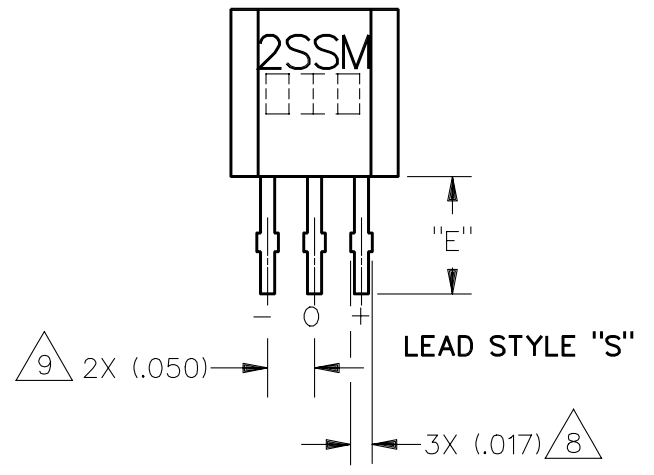
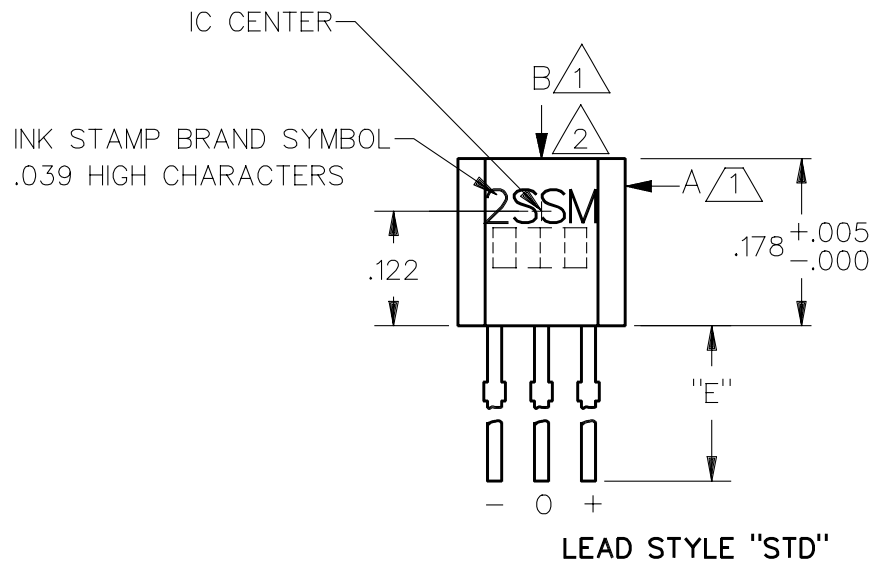
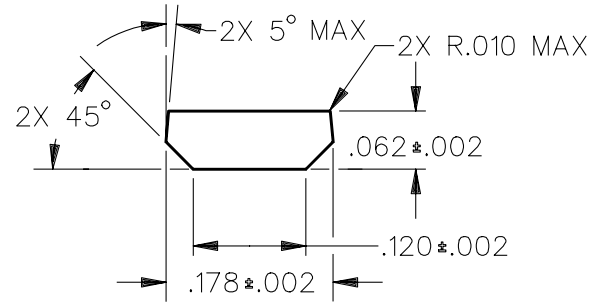
A	PR23372	J A K	27 MAR 98
B	CO93840	J A F	5 JAN 99

CHECK  
2

CHECK

DRAWN  
J A K 27 MAR 98

REPLACES  
RELEASE NO. PR-23372



- NOTES
- 1 TO TEST THE SENSOR AGAINST THE SPECIFIED OPERATING CHARACTERISTICS PLACE IN A HELMHOLTZ COIL FIELD AND GIVE THE FOLLOWING HISTORY :  
35 GAUSS MINIMUM IN DIRECTION "A" : 35 GAUSS MINIMUM IN DIRECTION "B"  
(THIS ASSUMES THE CONVENTION THAT THE DIRECTION OF THE EXTERNAL FLUX OF A MAGNET IS FROM THE NORTH TO SOUTH POLE OF THE MAGNET)
  - 2 THE SENSOR WILL OPERATE WITH THE FLUX FROM EITHER POLE OF A MAGNET WHEN APPLIED IN THE DIRECTION AND LOCATION SHOWN
  - 3 AT SUPPLY VOLTAGE OF 3.8 TO 30 VDC AND OVER THE TEMPERATURE RANGE SPECIFIED
  - 4 AT 24°C ± 2°C, AND 16 VDC ±0.5 % SUPPLY VOLTAGE
  - 5 ABSOLUTE MAXIMUM RATINGS ARE THE EXTREME LIMITS THAT THE DEVICE WILL WITHSTAND WITHOUT DAMAGE TO THE DEVICE. HOWEVER, THE ELECTRICAL AND MAGNETIC CHARACTERISTICS ARE NOT GUARANTEED AS THE MAXIMUM LIMITS (ABOVE RECOMMENDED OPERATING CONDITIONS) ARE APPROACHED NOR WILL THE DEVICE NECESSARILY OPERATE AT ABSOLUTE MAXIMUM RATING
  - 6 THE MAGNETIC CHARACTERISTICS OF THE SENSOR MAY BE AFFECTED BY STRAY MAGNETIC FIELDS
  - 7 AMMOPACK STYLES "T2" & "T3". 24 SENSORS BETWEEN FOLDS, SKIP SPACE AT FOLD. MAY BE REFERRED TO AS "FAN FOLD"
  - 8 MAXIMUM SIZE OVER BURRS. ENTIRE LEAD MUST PASS THROUGH Ø.023 HOLE. LEAD REFERENCE DIMENSIONS DO NOT INCLUDE SOLDER THICKNESS
  - 9 DIMENSION REFERS TO THE LOCATION OF LEAD CENTERLINES AS THEY EXIT THE PLASTIC PACKAGE

THIRD ANGLE PROJECTION

SCALE 5 : 1

DO NOT SCALE PRINT

**UNLESS OTHERWISE SPECIFIED TOLERANCES ARE**

ONE PLACE	(.0)	±.030
TWO PLACE	(.00)	±.015
THREE PLACE	(.000)	±.005
ANGLES		±

WEIGHT

CATALOG LISTING  
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A	PR23372	J A K	27 MAR 98
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CHECK 3

CHECK

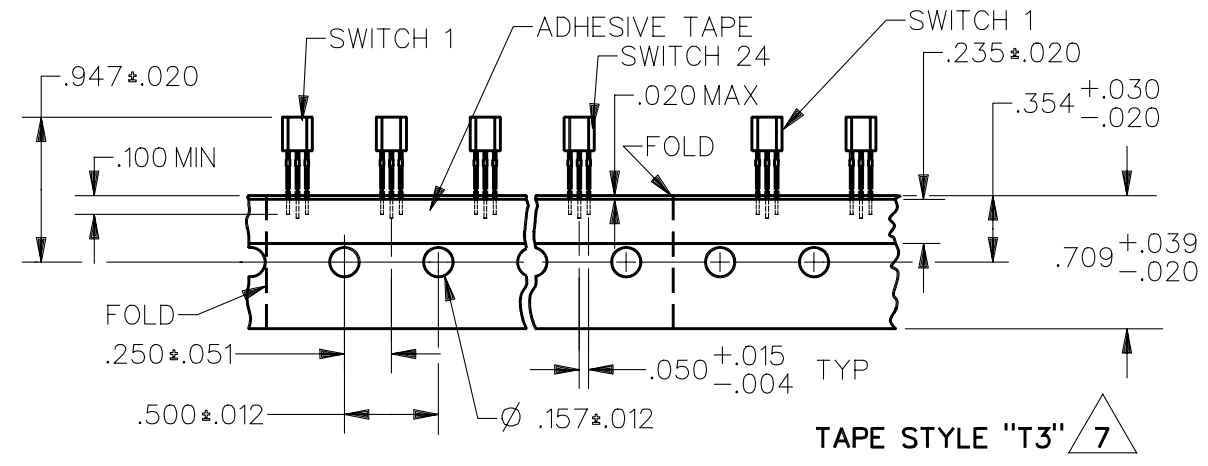
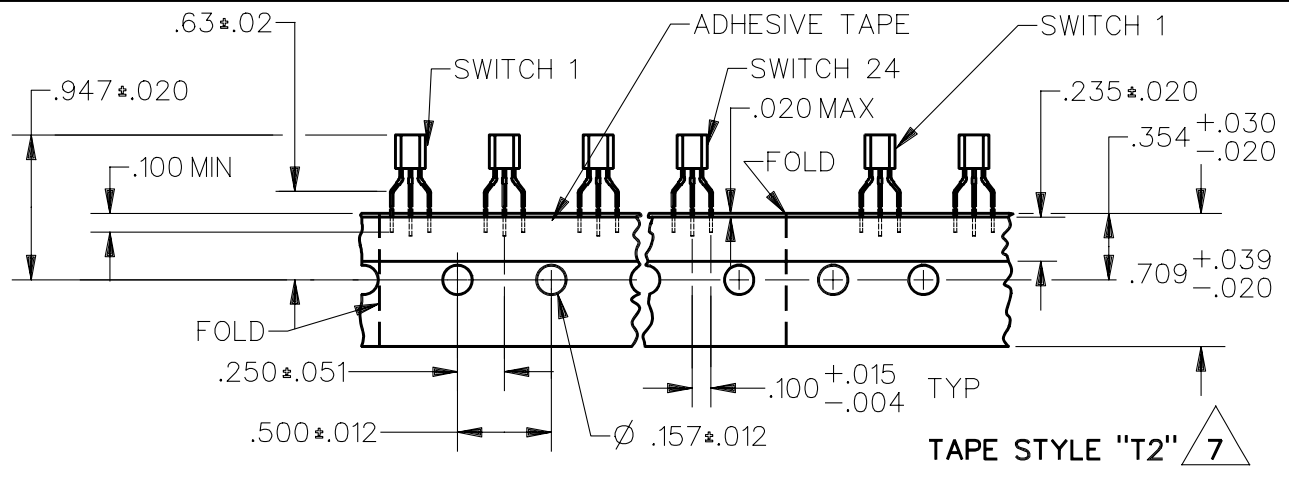
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**2SS52M SERIES CHART 1**

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**MAGNETIC CHARACTERISTICS** 1 3 6

TEMPERATURE RANGE	-20°C TO 85°C	-40°C TO 150°C
OPERATE MAX	25 GAUSS	25 GAUSS
RELEASE MIN	5 GAUSS	4 GAUSS
DIFF MAX	7 GAUSS	8 GAUSS

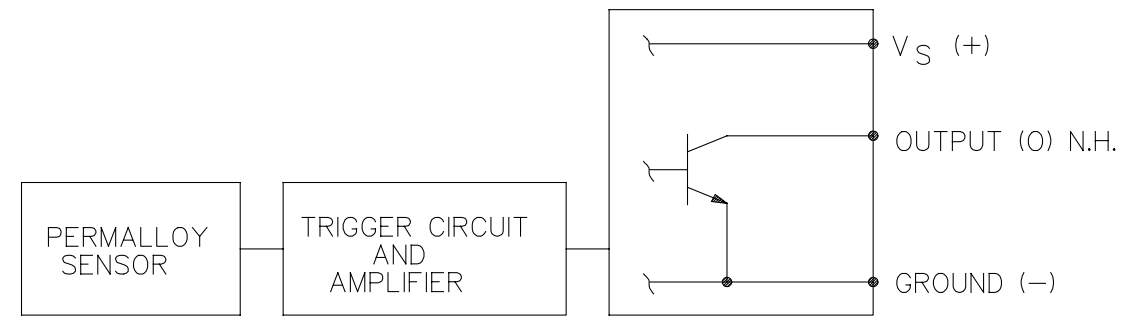
**ABSOLUTE MAXIMUM RATING** 5

SUPPLY VOLTAGE (VS)	3.8 TO 30 VOLTS DC
VOLTAGE EXTERNALLY APPLIED TO OUTPUT	+30 VDC MAX WITH SWITCH IN "OFF" CONDITION ONLY -0.5 VOLTS WITH SWITCH IN "OFF" OR "ON" CONDITION
OUTPUT CURRENT	20 mA
TEMPERATURE	-40°C TO 150°C
MAGNETIC FLUX	NO LIMIT, THE CIRCUIT CANNOT BE DAMAGED BY MAGNETIC OVERDRIVE

**ELECTRICAL CHARACTERISTICS**

	MIN	TYP	MAX	REMARKS
SUPPLY CURRENT (WITHOUT LOAD) <span style="border: 1px solid black; padding: 2px;">4</span>		6 mA	11 mA 10 mA	MAX (OPERATED) MAX (RELEASED)
OUTPUT VOLTAGE (OPERATED) <span style="border: 1px solid black; padding: 2px;">3</span>		0.25 V	0.40V	SINKING 20 mA MAX
OUTPUT LEAKAGE CURRENT (RELEASED) <span style="border: 1px solid black; padding: 2px;">3</span>			10 μA	LEAKAGE INTO SWITCH OUPUT
OUTPUT SWITCHING TIME <span style="border: 1px solid black; padding: 2px;">3</span>				1600 OHM, 20 pF LOAD
RISE TIME		0.2 μS	1.5 μS	10% TO 90%
FALL TIME		0.1 μS	1.5 μS	90% TO 10%

**BLOCK DIAGRAM CURRENT SINKING OUTPUT**

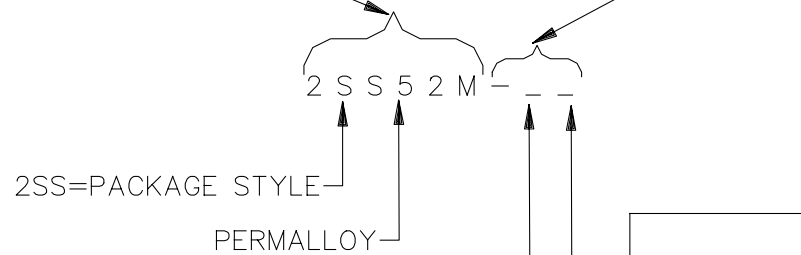


**CATALOGING SYSTEM**

**PREFIX** BASIC CATALOG LISTING: PACKAGE STYLE, MAGNETIC TYPE, ELECTRICAL/MAGNETIC SPECS

**SUFFIX** LEAD & PACKAGING OPTIONS: BULK, AMMOPACK

CHARACTERS IN THESE POSITIONS OF THE LISTING ARE BRANDED ON THE PRODUCT



DESCRIPTION	NOMINAL LEAD SPACING	NOMINAL "E" DIM LENGTH	PARTS PER CONTAINER
STANDARD, BULK PACK	.050	.590	1000/BAG
SURFACE MOUNT, BULK PACK	.050	.125	1000/BAG
TAPE, AMMOPACK	.100	.590	5000/BOX
TAPE, AMMOPACK	.050	.590	5000/BOX

THIRD ANGLE PROJECTION

SCALE NONE

DO NOT SCALE PRINT

**UNLESS OTHERWISE SPECIFIED TOLERANCES ARE**

ONE PLACE (.0)	±.030
TWO PLACE (.00)	±.015
THREE PLACE (.000)	±.005
ANGLES	±

WEIGHT