

MICRO SWITCH
a Honeywell Division
FED. MFG. CODE 91924

SOLID STATE SENSOR

CATALOG LISTING
2SS52M SERIES CHART 1

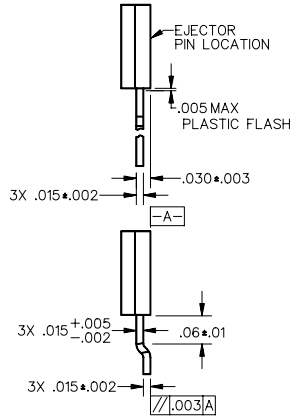
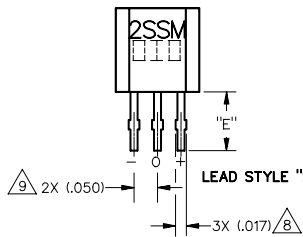
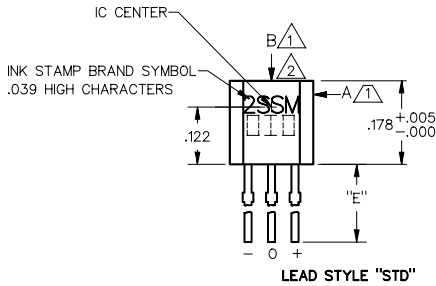
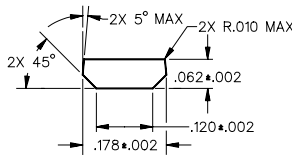
THIS DRAWING COVERS A PROPRIETARY ITEM AND IS THE PROPERTY OF MICRO SWITCH, A DIVISION OF HONEYWELL. THIS DRAWING IS NOT TO BE COPIED OR USED WITHOUT THE APPROVAL OF MICRO SWITCH

CATALOG LISTING
2SS52M SERIES CHART 1
PAGE 1 OF 2
ISSUE 3
RELEASE NO. PR-23372

REVISIONS
A PR23372
27 MAR 98
B C09384C
5 JUN 98

DDM/CAD
DRAWN
J A K 27 MAR 98
CHECK J A F 6 APR 98
CHECK

ANSI Y14.5M-1982 APPLIES



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" TEST TO THE OPERATING CHARACTERISTICS 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	

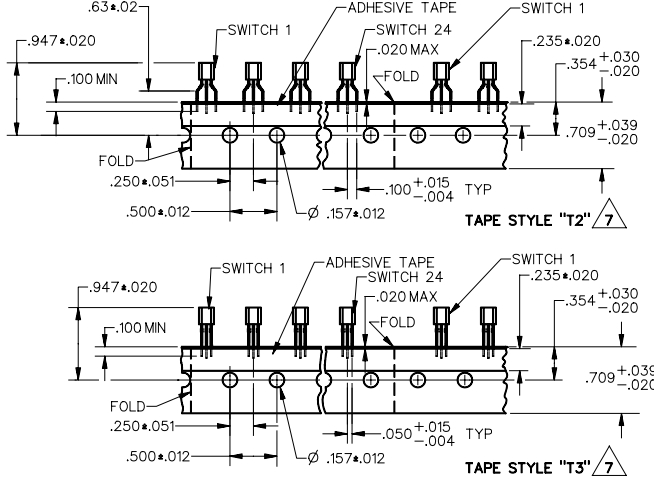
CATALOG LISTING
2SS52M SERIES CHART 1
 PAGE 2 OF 2
 ISSUE 3
 CHECK
 REVISIONS
 A PR23372
 27 MAR 98
 B C093840
 5 JUN 98
 J A K 27 MAR 98
 J A F 6 APR 98
 DDM/CAD
 DRAWN
 J A K 27 MAR 98
 J A F 6 APR 98
 CHECK
 RELEASE NO. PR-23372
 REPLACES
 ANSI Y14.5M-1982 APPLIES

MICRO SWITCH
 a Honeywell Division
 FED. MFG. CODE 91924

SOLID STATE SENSOR

CATALOG LISTING
2SS52M SERIES CHART 1

THIS DRAWING COVERS A PROPRIETARY ITEM AND IS THE PROPERTY OF MICRO SWITCH, A DIVISION OF HONEYWELL. THIS DRAWING IS NOT TO BE COPIED OR USED WITHOUT THE APPROVAL OF MICRO SWITCH



MAGNETIC CHARACTERISTICS Δ 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

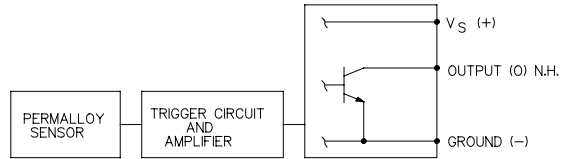
ABSOLUTE MAXIMUM RATING Δ

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) Δ 4		6 mA	11 mA	MAX (OPERATED) MAX (RELEASED)
OUTPUT VOLTAGE (OPERATED) Δ 3		0.25 V	0.40V	SINKING 20 mA MAX
OUTPUT LEAKAGE CURRENT (RELEASED) Δ 3			10 μ A	LEAKAGE INTO SWITCH OUTPUT
OUTPUT SWITCHING TIME Δ 3				1600 OHM, 20 pF LOAD
RISE TIME		0.2 μ S	1.5 μ S	10% TO 90%
FALL TIME		0.1 μ S	1.5 μ S	90% TO 10%

BLOCK DIAGRAM CURRENT SINKING OUTPUT

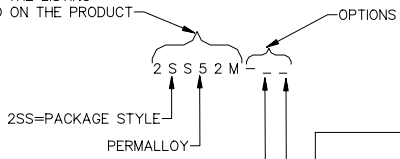


CATALOGING SYSTEM

PREFIX **SUFFIX**

BASIC CATALOG LISTING: LEAD & PACKAGING OPTIONS:
 PACKAGE STYLE, MAGNETIC TYPE, BULK, AMMPACK
 ELECTRICAL/MAGNETIC SPECS

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, AMMPACK	.100	.590	5000/BOX
TAPE, AMMPACK	.050	.590	5000/BOX

THIRD ANGLE PROJECTION

SCALE NONE

DO NOT SCALE PRINT

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE

ONE PLACE (.0) \pm .030

TWO PLACE (.00) \pm .015

THREE PLACE (.000) \pm .005

ANGLES \pm

WEIGHT