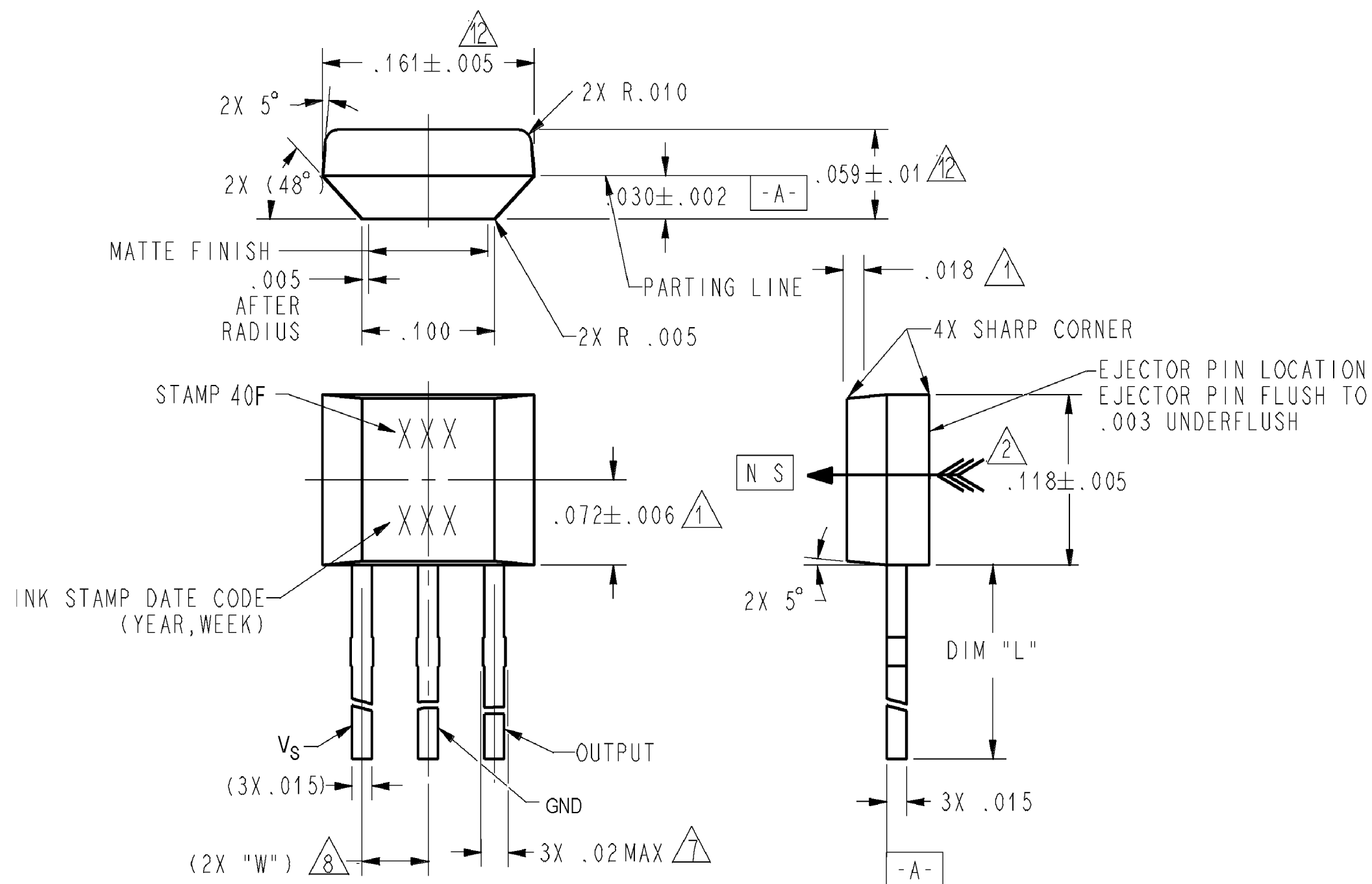


HONEYWELL
PART NUMBER

-

REV	DOCUMENT	CHANGED BY	CHECK
B	0040179	PK 29MAY08	ASD



NOTES

- 1 CENTERLINE OF HALL CELL
- 2 THE + MAGNETIC FLUX IS IN THE DIRECTION SHOWN (THIS ASSUMES THE CONVENTION THAT THE DIRECTION OF THE EXTERNAL FLUX OF A MAGNET IS FROM THE NORTH TO THE SOUTH POLE OF THE MAGNET)
- 3 - THE DEVICE CANNOT BE DAMAGED BY MAGNETIC OVERDRIVE
- 4 - THE MAGNETIC FIELD STRENGTH (GAUSS) REQUIRED TO CAUSE THE SWITCH TO CHANGE STATE (OPERATE AND RELEASE) WILL BE AS TABULATED. TO TEST THE SWITCH AGAINST THE SPECIFIED LIMITS, THE SWITCH MUST BE PLACED IN A UNIFORM MAGNETIC FIELD
- 5 - LEADS MUST BE ADEQUATELY SUPPORTED DURING ANY FORMING/SHEERING OPERATION TO ASSURE THAT THE LEADS ARE NOT STRESSED WITHIN THE PLASTIC
- 6 - PCB WAVE SOLDERING GUIDELINES ARE AS FOLLOWS:
250°C TO 260°C SOLDERING TEMPERATURE 3 SECONDS MAX SOLDERING TIME
- 7 BURRS ARE ALLOWED ONLY IF FULL LENGTH OF LEADS WILL PASS THROUGH $\varnothing .023$ HOLE. LEAD REFERENCE DIMENSIONS DO NOT INCLUDE SOLDER THICKNESS
- 8 DIMENSION REFERS TO THE LOCATION OF LEAD CENTERLINES AS THE EXIT THE PLASTIC PACKAGE
- 9 - SOME COMBINATIONS OF BASIC LISTING AND PACKAGE OPTIONS MAY NOT BE AVAILABLE
- 10 ABSOLUTE MAXIMUM RATINGS ARE THE EXTREME LIMITS THE DEVICE WILL MOMENTARILY WITHSTAND WITHOUT DAMAGE TO THE DEVICE. ELECTRICAL AND MAGNETIC CHARACTERISTICS ARE NOT GUARANTEED IF THE RATED VOLTAGE AND/OR CURRENTS ARE EXCEEDED NOR WILL THE DEVICE NECESSARILY OPERATE AT ABSOLUTE MAXIMUM RATINGS
- 11 LEAD STRAIGHTNESS MAY BE DETERIORATED ON SOME UNITS BY BULK PACKAGING. APPLICATIONS HAVING A CRITICAL LEAD STRAIGHTNESS REQUIREMENT SHOULD USE A TAPE PACKAGING OPTION
- 12 MOLDED PART DIMENSIONS DO NOT INCLUDE FLASH. FLASH IS LIMITED TO $.005$ MAX
- 13 THESE HALL EFFECT SENSORS MAY HAVE AN INITIAL OUTPUT IN EITHER THE ON OR OFF STATE IF POWERED UP WITH AN APPLIED MAGNETIC FIELD IN THE DIFFERENTIAL ZONE (APPLIED MAGNETIC FIELD $> B_{op}$ AND $< B_{op}$). HONEYWELL RECOMMENDS THAT THE APPLICATION CIRCUIT DESIGNER ALLOW 10 MICROSECONDS AFTER SUPPLY VOLTAGE HAS REACHED 5 VOLTS FOR THE OUTPUT VOLTAGE TO STABILIZE

CATALOG LISTING	TAPE STYLE	DIM "L"	DIM "W"	COMMENTS
SS40F	NONE	.575	.050	BULK - 1000/BAG

RELEASE NO.
0004092

ANSI Y14.5M-1982 APPLIES

DESIGN UNITS: INCH TOLERANCES UNLESS NOTED:	DRAWN CVS 24MAR03	CHECK SB 24MAR03	Honeywell	
NO PLACE X ± ONE PLACE .X ± TWO PLACE .XX ± THREE PLACE .XXX ± FOUR PLACE .XXXX ± ANGLES ±	THIS DRAWING COVERS A PROPRIETARY ITEM AND IS THE PROPERTY OF HONEYWELL. THIS DRAWING IS NOT TO BE COPIED OR USED WITHOUT THE PERMISSION OF HONEYWELL.		TITLE SOLID STATE SENSOR	
THIRD ANGLE PROJECTION	INTERPRET PER ANSI Y14.5M-1982 OTHER HONEYWELL ENGINEERING STANDARDS MAY APPLY		SIZE C	TYPE I
	RASTER		DRAWING NAME SS40F SERIES CHART 1	REV B
	SCALE 10:1		SHEET 1 OF 2	

D

D

C

C

B

B

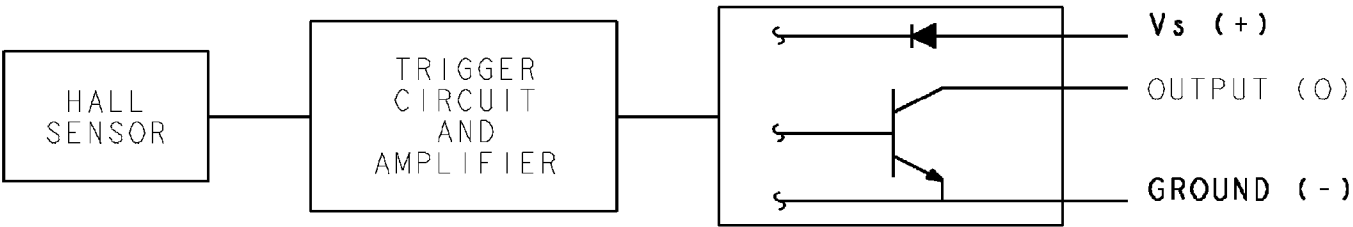
A

A

CHARACTERISTICS ARE AT $V_s=4.5$ TO 24 VOLTS WITH 20mA LOAD WITH $T_A=-40^{\circ}\text{C}$ TO $+125^{\circ}\text{C}$ UNLESS OTHERWISE NOTED

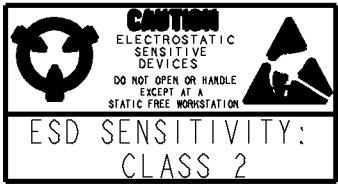
PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
SUPPLY VOLTAGE	25°C	4.5		24.0	VOLTS
SUPPLY CURRENT	25°C		6.8	10.0	mA
OUTPUT CURRENT	25°C			20.0	mA
V_{sat} AT 15mA	GAUSS >170 @ 25°C			0.4	VOLTS
OUTPUT LEAKAGE	GAUSS <-170 @ 25°C			1.0	μA
RISE TIME	25°C @ 4.5 V		0.5	1.5	μS
FALL TIME	25°C @ 4.5 V		0.2	1.5	μS
MAX OPERATE	25°C		45	110	GAUSS
MIN RELEASE	25°C	-110	-45		GAUSS
MIN DIFFERENTIAL	25°C	50			GAUSS
OPERATING TEMP		-40		+125	$^{\circ}\text{C}$
STORAGE TEMP		-55		+165	$^{\circ}\text{C}$

BLOCK DIAGRAM CURRENT SINKING OUTPUT



ABSOLUTE MAXIMUM RATING

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
SUPPLY VOLTAGE		-28		28	VOLTS
APPLIED OUTPUT VOLTAGE		-0.5		28	VOLTS
OUTPUT CURRENT				20	mA
MAGNETIC FLUX				NO LIMIT	GAUSS



ANSI Y14.5M-1982 APPLIES

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Honeywell			
SIZE	DWG TYPE	DRAWING NAME	REV
C	I	SS40F SERIES CHART 1	B
SCALE	-	SHEET 2 OF 2	

RELEASE NO.
0004092