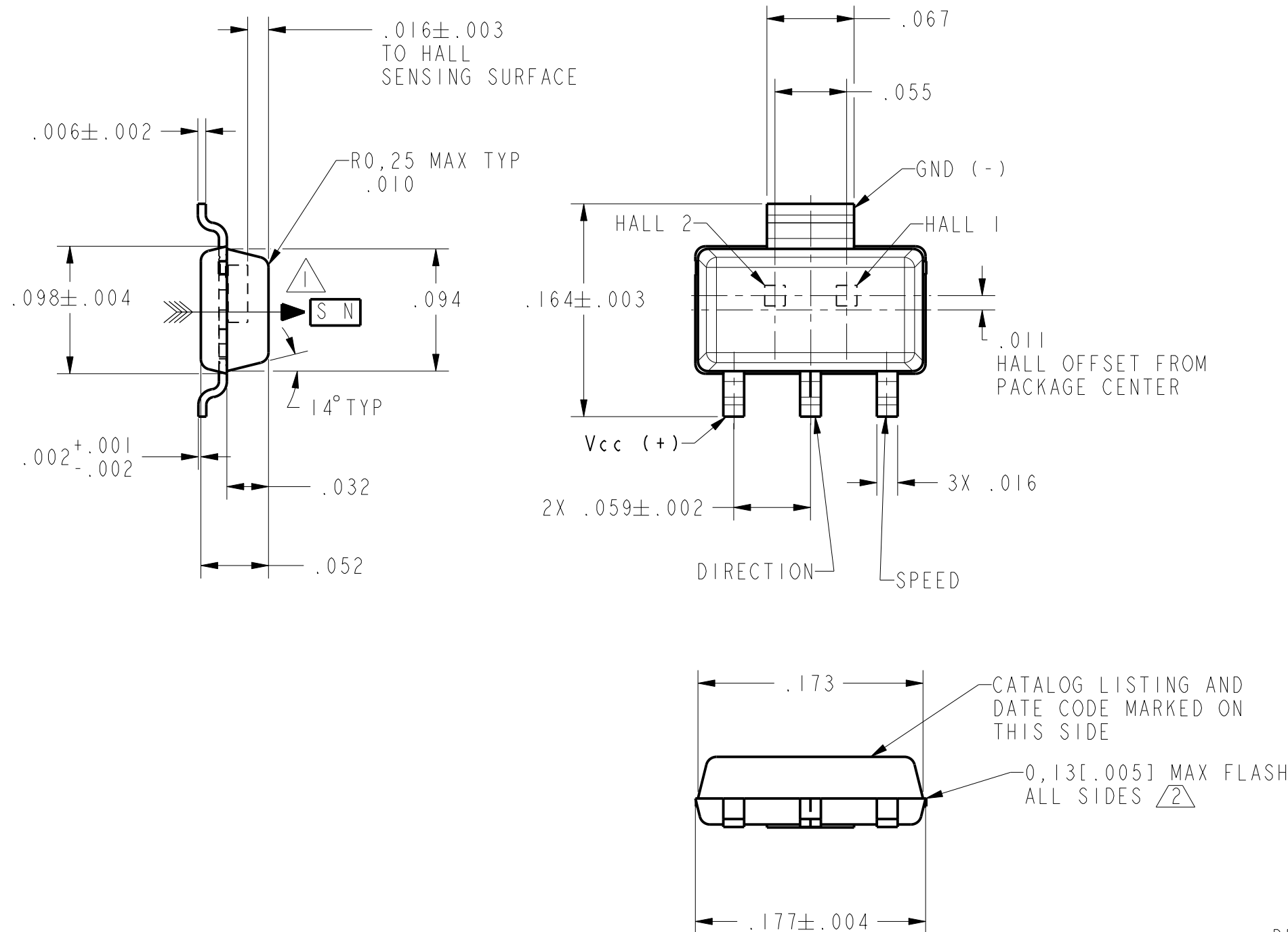


REV	DOCUMENT	CHANGED BY	CHECK
7	0018451	SR 18JAN06	DGD

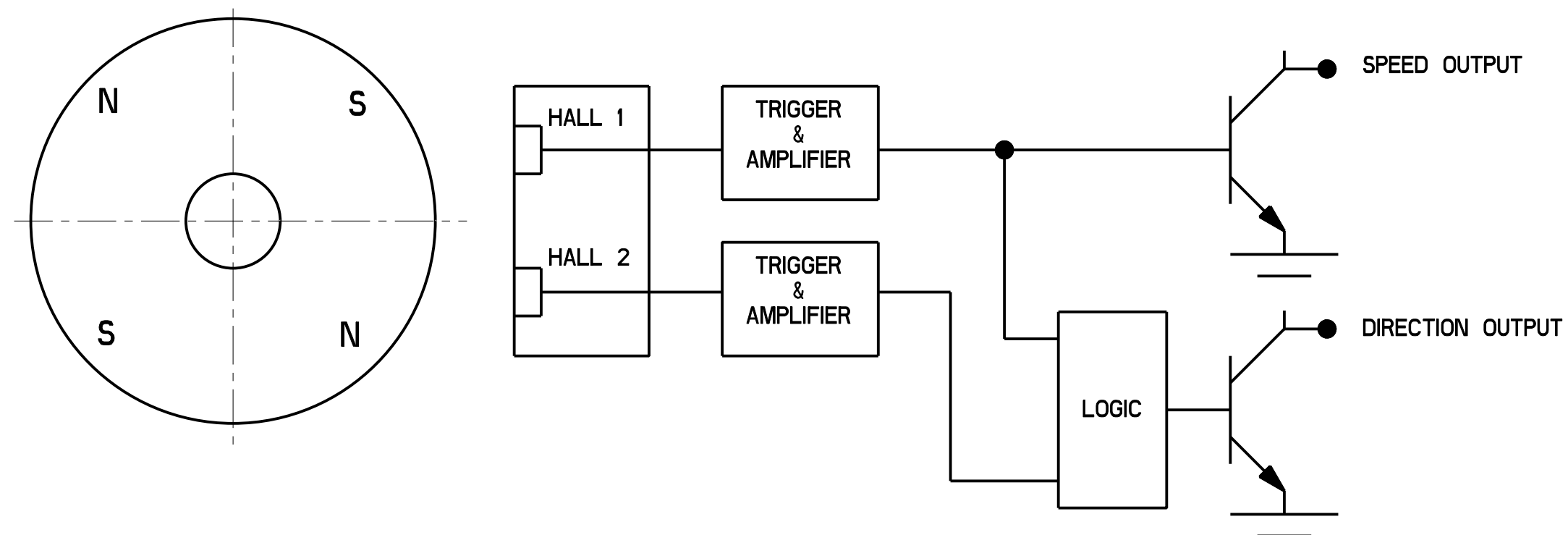


NOTES

- 1 THE MAGNETIC FLUX APPLIED TO OPERATE THE SENSOR MUST BE 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)
- 2 GATE VESTIGE OF 0,13[.008] MAXIMUM IS PERMITTED AT PACKAGE ENDS. UNDERFLUSH BREAKOUT IS LIMITED TO 0,18[.007] MAXIMUM
- 3 THIS PRODUCT IS SUPPLIED ONLY IN TAPE AND REEL FORM PER EIA STD 481
- 4 SOLDERING TEMPERATURE EXPOSURE MUST BE LIMITED TO 230°C (446°F) FOR NOT MORE THAN 10 SECONDS. INFRARED REFLOW IS RECOMMENDED. EXPOSURE TO WAVE SOLDERING TECHNIQUES OR SOLDERING TEMPERATURES OUTSIDE THE RECOMMENDATION CONDITIONS ARE LIKELY TO DEGRADE SENSOR PERFORMANCE AND RELIABILITY, AND WILL VOID ANY WARRANTY
- 5 ABSOLUTE MAXIMUM RATINGS ARE THE EXTREME LIMITS THE SENSOR WILL MOMENTARILY WITHSTAND WITHOUT DAMAGE. ELECTRICAL AND MAGNETIC PERFORMANCE LIMITS ARE NOT GUARANTEED IF THE ABSOLUTE MAXIMUM LIMITS ARE EXCEEDED, NOR WILL THE SENSOR NECESSARILY OPERATE AT THE ABSOLUTE MAXIMUM LIMITS
- 6 THE LISTED RATING IS FOR TESTING AT 25°C PER IEC 801-2, LEVEL 1, WHEN TESTED PER MIL-STD-883, METHOD 3015.7 THE SENSOR WILL MEET CLASS 3 (4KV MIN)
- 7 LIMIT APPLIES TO EACH OUTPUT
- 8 ALL DIMENSIONS : MM
INCH
- 9 DESIGN UNITS : INCH (METRIC DIMENSIONS ARE FOR REFERENCE ONLY)
- 10 WHEN THE CHANGE IN MAGNETIC FLUX AT H1 LEADS THE CHANGE AT H2, THE DIRECTION OUTPUT IS HIGH; WHEN H1 FOLLOWS H2, THE DIRECTION OUTPUT IS LOW
- 10 - OPEN COLLECTOR OUTPUTS CAPABLE OF SWITCHING 50 mA WITHOUT DAMAGE. DEVICE WILL NOT PERFORM WITHIN SPECIFICATION WHILE SWITCHING 50 mA

DESCRIPTION :

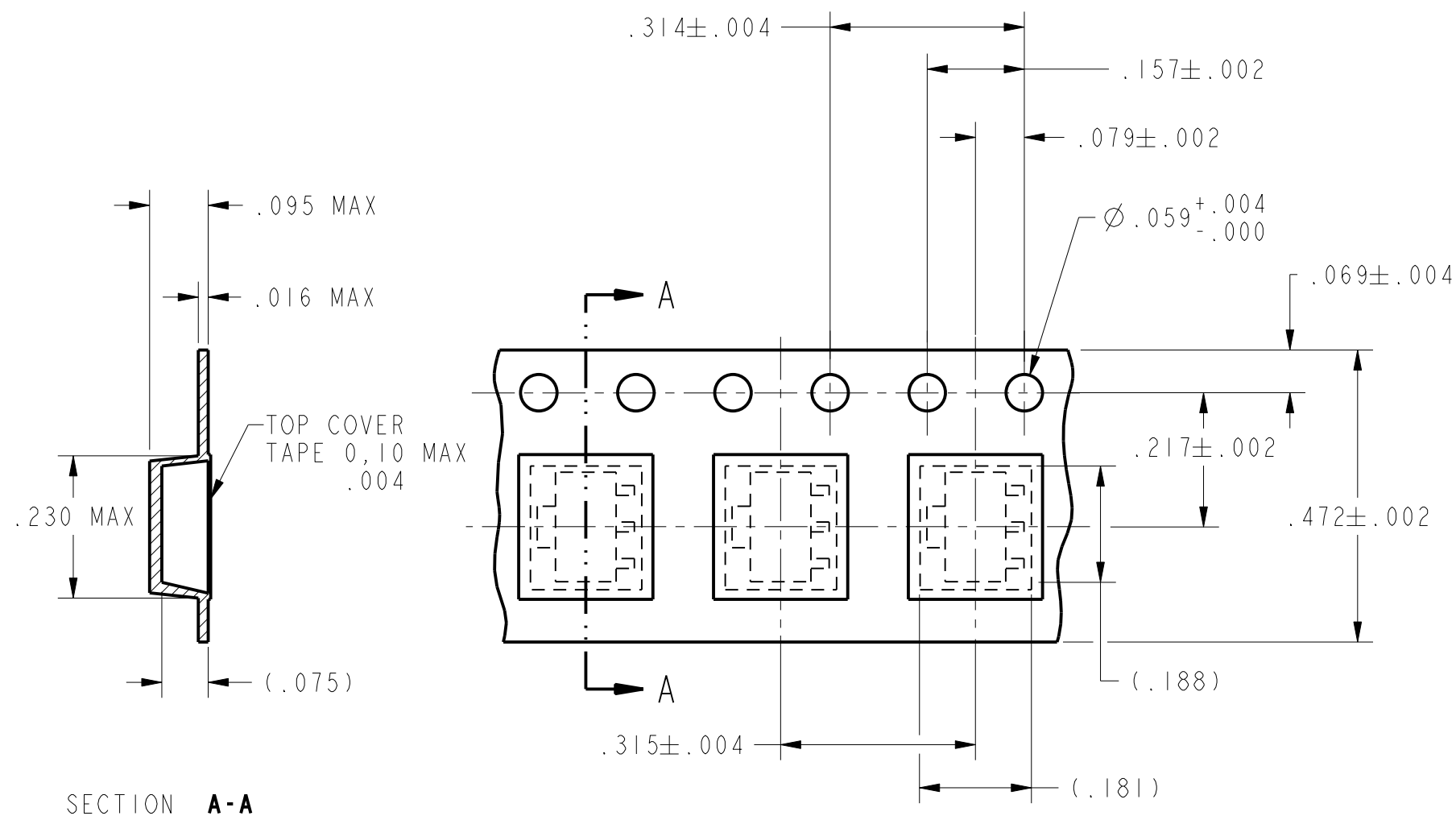
A HALL EFFECT BASED SPEED AND DIRECTION SENSOR WITH TWO SEPARATE OUTPUTS. TWO ACTIVE HALL LATCHES PROVIDE INDICATION OF THE SPEED AND DIRECTION OF MAGNETIC GRADIENT ACROSS THE PACKAGE FACE, SUCH AS THE GRADIENT FROM A ROTATING RING MAGNET



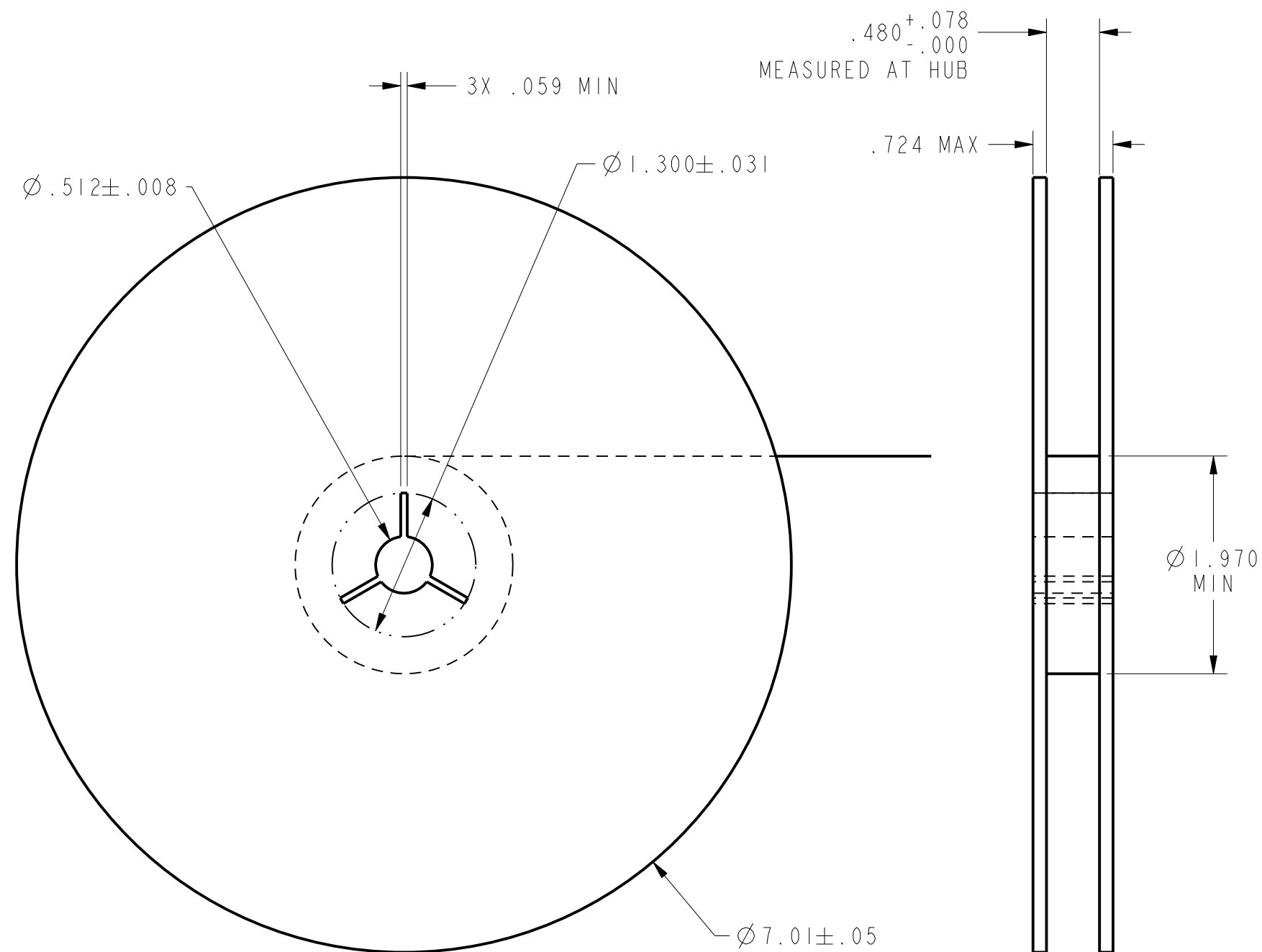
SENSOR FUNCTION DIAGRAM WITH CUSTOMER SUPPLIED RING MAGNET



UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:	<input checked="" type="checkbox"/> US (inch) CUSTOMARY	<input type="checkbox"/> SI (mm) METRIC	DRAWN	WJC	12SEP00	Honeywell			
NO PLACE	X	±.040 ±1	CHECK	SAV	12SEP00				TITLE
ONE PLACE	.X	±.030 ±0,4	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.			SOLID STATE SENSOR, -			
TWO PLACE	.XX	±.015 ±0,15				SIZE	DWG TYPE	DRAWING NAME	REV
THREE PLACE	.XXX	±.005 ±				C	I	SS526DT	7
ANGLES		±				SCALE: 0 : 1		WEIGHT	
RAW MATERIAL-COMMERCIAL STANDARD		±	PTC 3D		ASME Y14.5M-1994		SHEET 1 OF 2		
THIRD ANGLE PROJECTION			DIMENSIONS ARE TO BE MET BEFORE PROTECTIVE COATINGS ARE APPLIED						



TAPE AND REEL DIMENSIONS $\triangle 3$



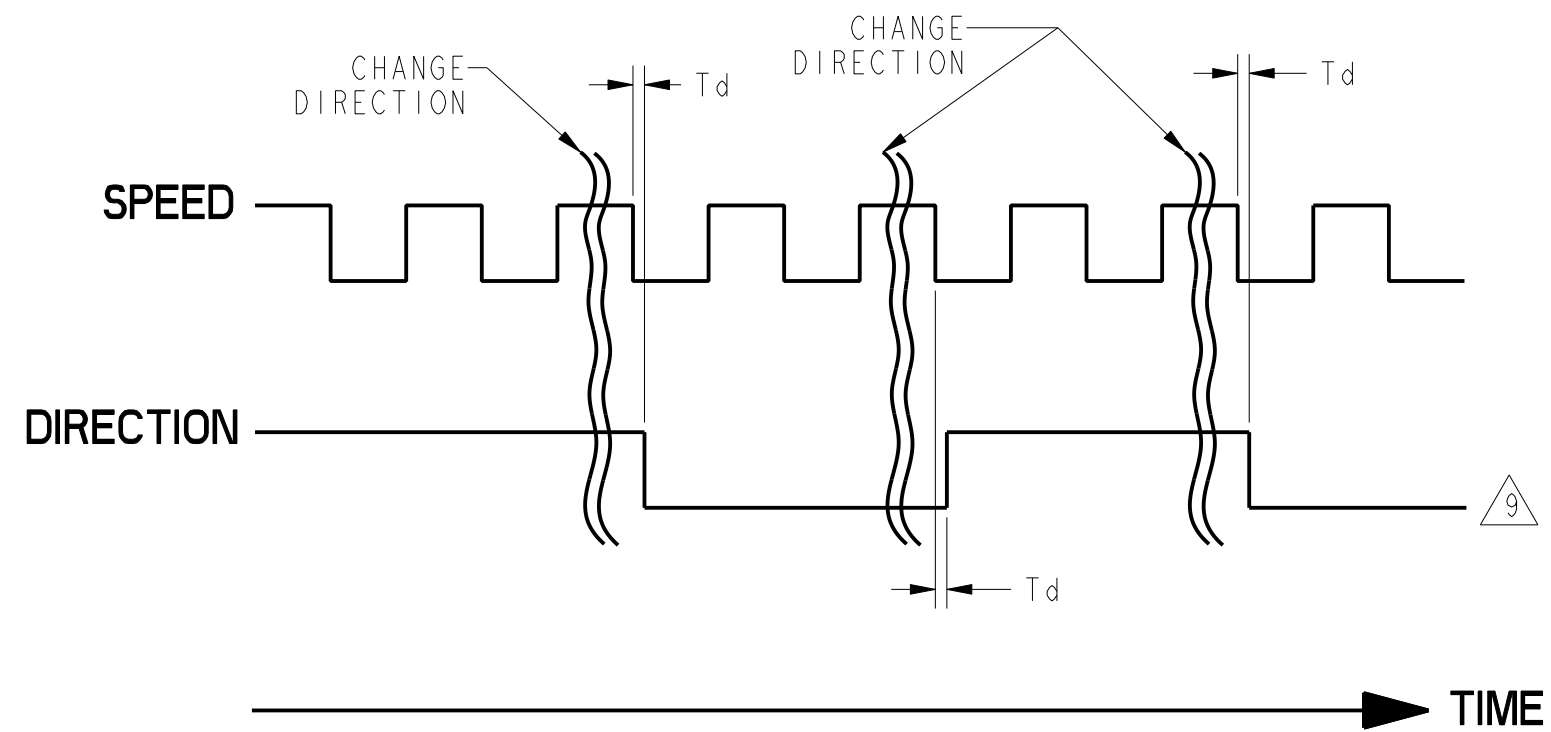
DIRECTION OF FEED FROM REEL



ABSOLUTE MAXIMUM RATING $\triangle 5$				
CHARACTERISTIC	SYMBOL	MIN	MAX	UNITS
POWER SUPPLY	Vcc	-0.5	30	V
OUTPUT VOLTAGE (OFF)	Vout	-0.5	30	V
OUTPUT ON CURRENT	Iout	-	10	mA
STORAGE TEMPERATURE	Ts	-65	160	C
OPERATING TEMPERATURE	T	-40	150	C
ELECTROSTATIC DISCHARGE $\triangle 6$	ESD	2	-	KV
MAGNETIC FLUX	B	NO LIMIT		

ELECTRICAL SPECIFICATIONS						
CHARACTERISTIC	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
SUPPLY VOLTAGE	Vcc		3.4	-	24	V
SUPPLY CURRENT OFF	Ioff	Vcc=24V, -40<T<125°C, Vout=24V, B<MIN REL	-	-	12	mA
SUPPLY CURRENT ON	Ion	Vcc=24V, -40<T<125°C, Isink=5mA, B>MAX OP	-	-	14	mA
LOAD CURRENT $\triangle 7$	Isink	Vcc=24V, -40<T<125°C, Isink=5mA, B>MAX OP	-	-	5	mA
OUTPUT SATURATION $\triangle 7$	Vsat	Vcc=24V, -40<T<125°C, Isink=5mA, B>MAX OP	-	-	0.4	V
LEAKAGE CURRENT $\triangle 7$	Ileak	Vcc=24V, -40<T<125°C, Vout=24V, B<MIN REL	-	-	10	μ A
CIRCUIT SPEED TO DIR DELAY	Td	Vcc=12V, RL=1.6K OHM, CL=20pF	-	-	5	μ S
RISE TIME $\triangle 7$	Tr	Vcc=12V, RL=1.6K OHM, CL=20pF	-	-	1.5	μ S
FALL TIME $\triangle 7$	Tf	Vcc=12V, RL=1.6K OHM, CL=20pF	-	-	1.5	μ S
FREQUENCY	Top	Vcc=12V, RL=1.6K OHM, CL=20pF	<1	-	>1000	Hz

MAGNETIC SPECIFICATIONS $\triangle 1$ $\triangle 7$						
CHARACTERISTIC	SYMBOL	TEST CONDITIONS	MIN	TYP	MAX	UNITS
OPERATE POINT	Bop	T=25°C	-	130	-	GAUSS
	Bop	-40<T<125°C	60	-	200	GAUSS
RELEASE POINT	Brel	T=25°C	-	-130	-	GAUSS
	Brel	-40<T<125°C	-60	-	-200	GAUSS
DIFFERENTIAL (OP-REL)	Diff	T=25°C	-	260	-	GAUSS
	Diff	-40<T<125°C	200	-	320	GAUSS
SYMMETRY [(OP+REL)/2]	Sym	T=25°C	-	0	-	GAUSS
	Sym	-40<T<125°C	-65	-	65	GAUSS



OUTPUT TIMING DIAGRAM

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:		<input checked="" type="checkbox"/> US (inch) CUSTOMARY	<input type="checkbox"/> SI (mm) METRIC	DRAWN	WJC	12SEP00	Honeywell			
NO PLACE	X	±.040	±1	CHECK	SAV	12SEP00				
ONE PLACE	.X	±.030	±0.4	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			
TWO PLACE	.XX	±.015	±0.15				SOLID STATE SENSOR, -			
THREE PLACE	.XXX	±.005	±				SIZE	DWG TYPE	DRAWING NAME	REV
ANGLES		±	±				C	I	SS526DT	7
RAW MATERIAL-COMMERCIAL STANDARD		±	±	DIMENSIONS ARE TO BE MET BEFORE PROTECTIVE COATINGS ARE APPLIED			SCALE 10:1 WEIGHT SHEET 2 OF 2			
THIRD ANGLE PROJECTION				PTC 3D	ASME Y14.5M-1994					