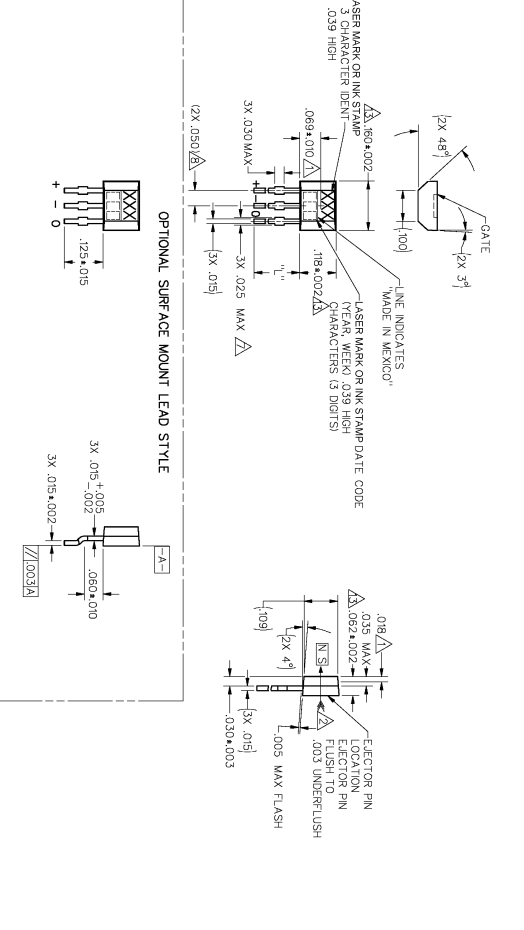
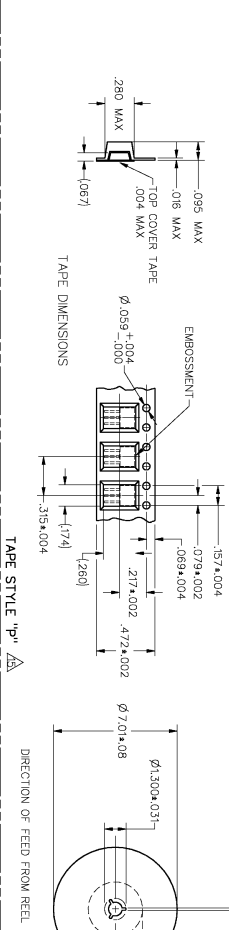
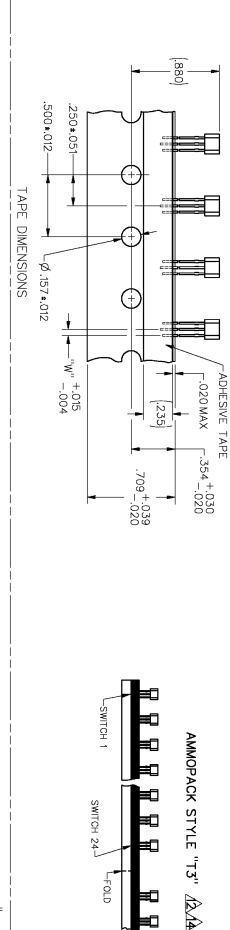
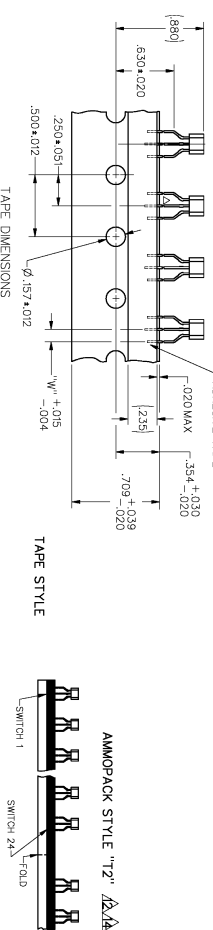


TAPE PACKING OPTIONS



- NOTES
- 1 - CENTERLINE OF HALL CELL
 - 2 - DIMENSION "L" IS IN THE DIRECTION SHOWN (THIS ASSURES THE CONNECTION 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 - OUTPUT TYPE - RADIOMETRIC SUPPORTED DURING ANY FORMING/SHEERING OPERATION TO PREVENT DAMAGE TO THE DEVICE
 - 5 - ASSURE THAT THE LEADS ARE NOT STRESSED WITHIN THE ELASTIC
 - 6 - PCB WAVE SOLDERING GUIDELINES ARE AS FOLLOWS:
 - BARBS ARE ALLOWED ONLY IF FULL LENGTH OF LEADS WILL PASS THROUGH $\phi 0.23$ HOLE.
 - ABSOLUTE MAXIMUM RATINGS ARE THE EXTREME LIMITS THE DEVICE WILL MOMENTARILY WITHSTAND WITHOUT DAMAGE TO THE DEVICE. ELECTRICAL AND MAGNETIC CHARACTERISTICS THE DEVICE NECESSARILY OPERATE AT ABSOLUTE MAXIMUM RATINGS
 - LEAD STRAIGHTNESS MAY BE DETERIORATED ON SOME UNITS BY BULK PACKAGING.
 - 7 - APPLICATIONS HAVING A CRITICAL LEAD STRAIGHTNESS REQUIREMENT SHOULD USE A TAPE PACKAGING OPTION 24 SWITCHES BETWEEN FOLDS, SKIP 1 SPACE AT FOLD. MAY BE REFERRED TO AS "AN FOLD"
 - 8 - DIMENSION REFERS TO THE LOCATION OF LEAD CENTERLINES AS THE EXIT THE PLASTIC PACKAGE
 - 9 - ABSOLUTE MAXIMUM RATINGS ARE THE EXTREME LIMITS THE DEVICE WILL MOMENTARILY WITHSTAND WITHOUT DAMAGE TO THE DEVICE. ELECTRICAL AND MAGNETIC CHARACTERISTICS THE DEVICE NECESSARILY OPERATE AT ABSOLUTE MAXIMUM RATINGS
 - 10 - APPLICATIONS HAVING A CRITICAL LEAD STRAIGHTNESS REQUIREMENT SHOULD USE A TAPE PACKAGING OPTION 24 SWITCHES BETWEEN FOLDS, SKIP 1 SPACE AT FOLD. MAY BE REFERRED TO AS "AN FOLD"
 - 11 - WOLED PART DIMENSIONS DO NOT INCLUDE FLASH. FLASH IS LIMITED TO .005 MAXIMUM
 - 12 - TAPE AND AMMOPACK PER EA-468
 - 13 - DIMENSION "L" IS IN THE DIRECTION SHOWN (THIS ASSURES THE CONNECTION THAT THE DIRECTION OF THE EXTERNAL FLUX OF A MAGNET IS FROM THE NORTH TO THE SOUTH POLE OF THE MAGNET)
 - 14 - CENTERLINE OF HALL CELL
 - 15 - ASSURE THAT THE LEADS ARE NOT STRESSED WITHIN THE ELASTIC
 - 16 - PCB WAVE SOLDERING GUIDELINES ARE AS FOLLOWS:
 - BARBS ARE ALLOWED ONLY IF FULL LENGTH OF LEADS WILL PASS THROUGH $\phi 0.23$ HOLE.
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 - 22 - TAPE AND AMMOPACK PER EA-468
 - 23 - DIMENSION "L" IS IN THE DIRECTION SHOWN (THIS ASSURES THE CONNECTION THAT THE DIRECTION OF THE EXTERNAL FLUX OF A MAGNET IS FROM THE NORTH TO THE SOUTH POLE OF THE MAGNET)
 - 24 - CENTERLINE OF HALL CELL
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 - 30 - APPLICATIONS HAVING A CRITICAL LEAD STRAIGHTNESS REQUIREMENT SHOULD USE A TAPE PACKAGING OPTION 24 SWITCHES BETWEEN FOLDS, SKIP 1 SPACE AT FOLD. MAY BE REFERRED TO AS "AN FOLD"
 - 31 - WOLED PART DIMENSIONS DO NOT INCLUDE FLASH. FLASH IS LIMITED TO .005 MAXIMUM
 - 32 - TAPE AND AMMOPACK PER EA-468

CATALOG LISTING	TAPE STYLE	DIR. "L"	DIR. "W"	COMMENTS
SS496A	NONE	.590	.050	BULK-1000/BAG
SS496A-T2	NONE	.590	.050	BULK-1000/BOX
SS496A-T3	NONE	.590	.050	BULK-1000/BOX
SS496A-S	P	.125	.050	BULK-1000/BAG
SS496A-SP	NONE	.125	.050	1000/PACKET TAPE AND REEL
SS496A-T2	NONE	.590	.050	BULK-1000/BAG
SS496A-T3	NONE	.590	.050	BULK-1000/BAG
SS496A-S	P	.125	.050	BULK-1000/BAG
SS496A-SP	NONE	.125	.050	1000/PACKET TAPE AND REEL
SS496B	NONE	.590	.050	BULK-1000/BAG
SS496B-T2	NONE	.590	.050	BULK-1000/BOX
SS496B-T3	NONE	.590	.050	5000/BOX
SS496B-S	NONE	.125	.050	BULK-1000/BAG
SS496B-SP	P	.125	.050	1000/PACKET TAPE AND REEL

ESD SENSITIVITY
 MICRO SWITCH
 MANUFACTURE RADIOMETRIC
 LINEAR HALL EFFECT SENSOR
 SS496 SERIES CHART 1

SCALE 5:1
 DIMENSIONS ARE IN INCHES
 DIMENSIONS IN PARENTHESES ARE IN MILLIMETERS
 DIMENSIONS IN PARENTHESES ARE IN MILLIMETERS
 DIMENSIONS IN PARENTHESES ARE IN MILLIMETERS
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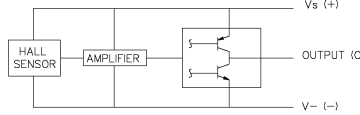
CHARACTERISTICS ARE AT $V_s=5.00$ WITH 4.7K OUTPUT TO MINUS WITH $T_A = -40^{\circ}\text{C}$ TO $+125^{\circ}\text{C}$ UNLESS OTHERWISE SPECIFIED

SS496A

SS496 SERIES CHART 1

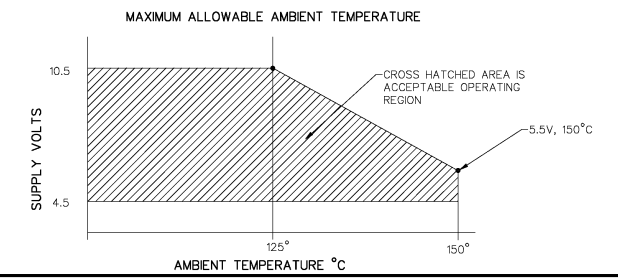
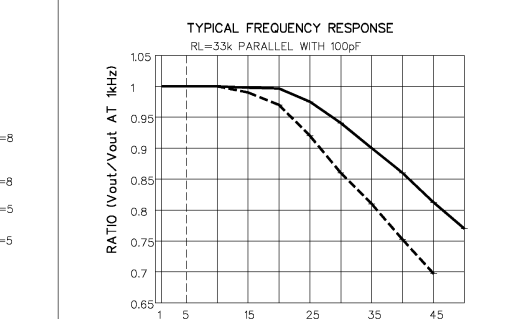
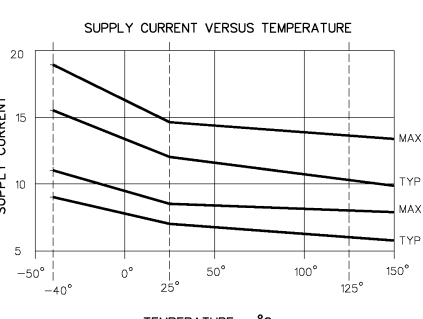
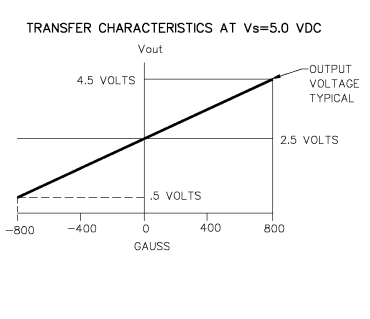
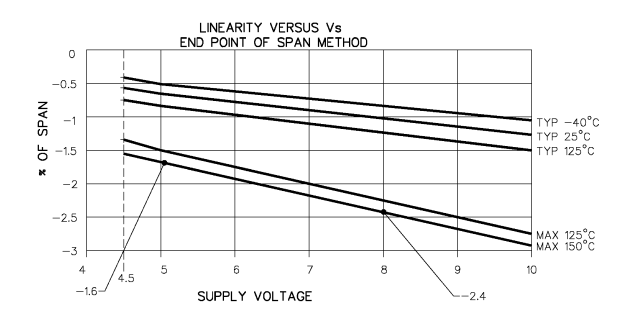
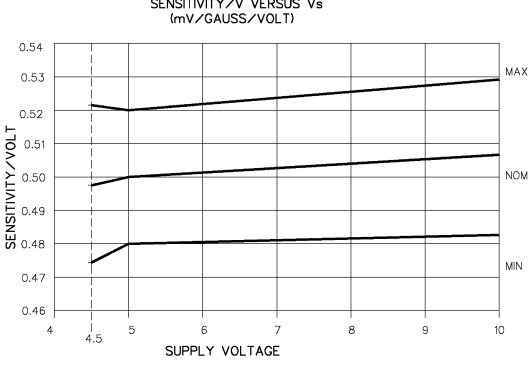
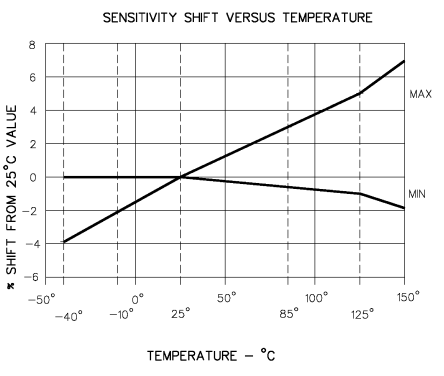
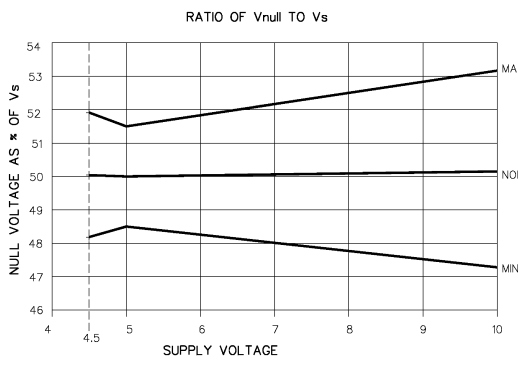
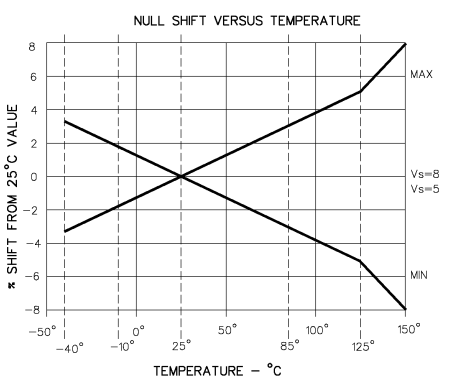
PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
SENSITIVITY	$T_A = 25^{\circ}\text{C}$	2.4	2.5	2.6	mV/GAUSS
NULL	$T_A = 25^{\circ}\text{C}$	2.425	2.50	2.575	VOLTS
SUPPLY CURRENT	$T_A = 25^{\circ}\text{C}$		7	8.7	mA
OUTPUT CURRENT SOURCE	$V_s > 4.5$	1mA	1.5mA		
OUTPUT CURRENT SINK	$V_s > 4.5$.6mA	1.5mA		
OUTPUT CURRENT SINK	$V_s > 5.0$	1mA	1.5mA		
RESPONSE TIME			3μs		
OUTPUT VOLTAGE SWING					
VOM -	-B APPLIED	.4	.2		VOLTS
VOM +	+B APPLIED	$V_s - .4$	$V_s - .2$		VOLTS
B LIMITS FOR LINEAR OPERATION					
-B MAX		-750	-840		GAUSS
+B MAX		+750	+840		GAUSS
Vnull DRIFT	$B = 0, T_A = 25^{\circ}\text{C}$ TO 125°C		-0.048		% / °C
Vnull DRIFT	$B = 0, T_A = +125^{\circ}\text{C}$ TO $+150^{\circ}\text{C}$		-0.064		% / °C
SENSITIVITY DRIFT	$T_A = +25^{\circ}\text{C}$ TO $+125^{\circ}\text{C}$		-0.01		% / °C
SENSITIVITY DRIFT	$T_A = -40^{\circ}\text{C}$ TO $+25^{\circ}\text{C}$		0		% / °C
LINEARITY	$B = -600$ TO $+600$		-1.0		% OF SPAN
SUPPLY VOLTAGE	-40°C TO $+125^{\circ}\text{C}$	4.5	5.0	10.5	VOLTS
OPERATING TEMP	SEE MAX TEMPERATURE CHART	-40		+150	°C

BLOCK DIAGRAM CURRENT SINKING OR SOURCING OUTPUT



ABSOLUTE MAXIMUM CHARACTERISTICS

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	MAX	UNITS
SUPPLY VOLTAGE	V_{cc}		-0.5	11	V
OUTPUT VOLTAGE	V_{out}		-0.5	11	V
OUTPUT CURRENT	I_{out}	SOURCE OR SINK		10	mA
TEMPERATURE	T_A	OPERATING	-55	150	°C
	T_s	STORAGE ($V_{cc}=0$)	-55	165	°C



CAUTION
ESD SENSITIVITY:
CLASS 3

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MICRO SWITCH
a Honeywell Division

MINIATURE RATIO-METRIC
LINEAR HALL EFFECT SENSOR
CATALOG LISTING
SS496 SERIES CHART 1

THIRD ANGLE PROJECTION
DO NOT SCALE PRINT
SCALE: NONE
UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:
ONE PLACE .010 ±.030
TWO PLACES .001 ±.015
THREE PLACES .0001 ±.0005
ANGLES ±2°
WEIGHT

DRAWING NUMBER: SS496 SERIES CHART 1
 OF: 10
 PAGE: 7
 REVISED: 10/03/95
 BY: J.A. HENSELBERG
 CHECKED: G. G. B. DEC. 28, 1994
 APPROVED: J.A. HENSELBERG
 RASTER

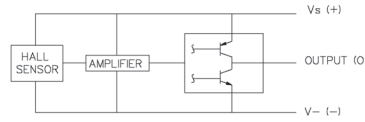
CHARACTERISTICS ARE AT $V_s=5.00$ WITH 4.7K OUTPUT TO MINUS WITH $T_A = -40^\circ\text{C}$ TO $+125^\circ\text{C}$ UNLESS OTHERWISE SPECIFIED

SS496A1

SS496 SERIES CHART 1

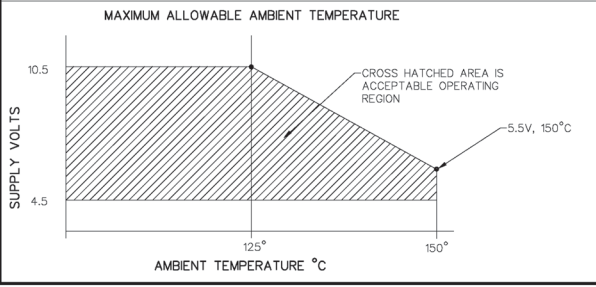
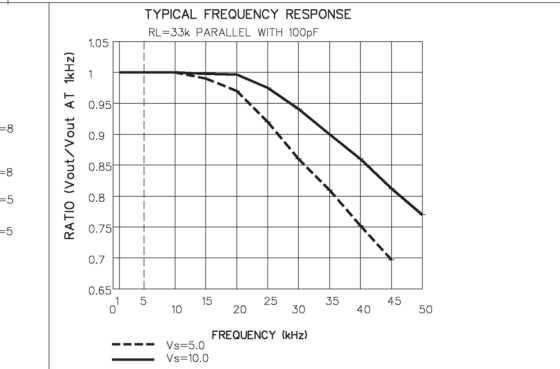
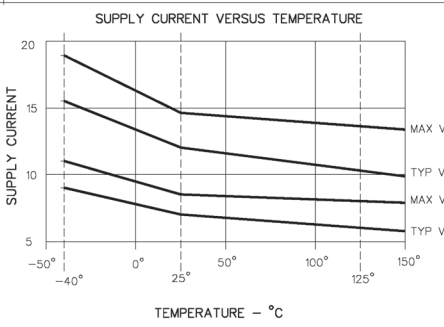
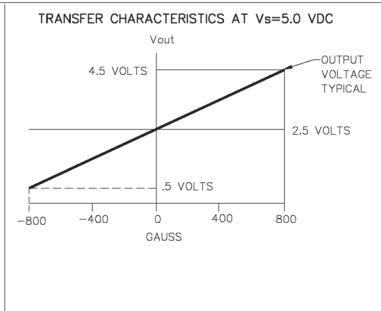
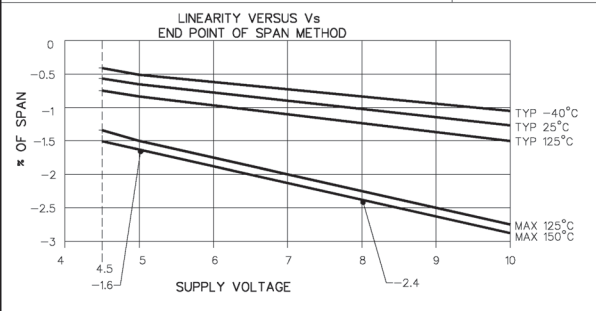
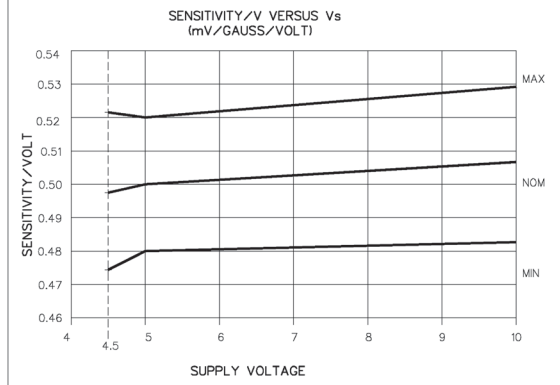
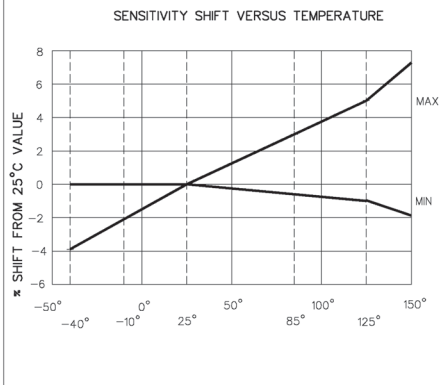
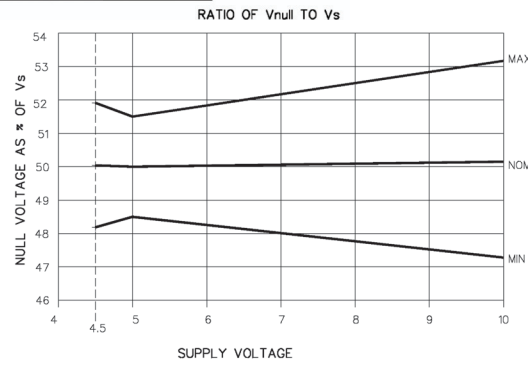
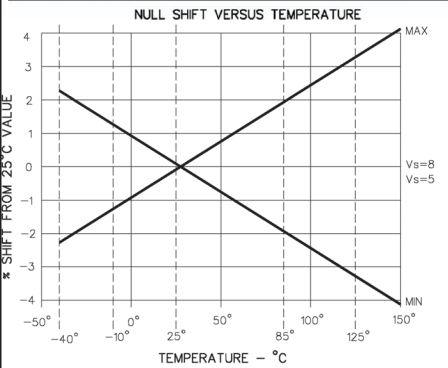
PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
SENSITIVITY	$T_A = 25^\circ\text{C}$	2.425	2.500	2.575	mV/GAUSS
NULL	$T_A = 25^\circ\text{C}$	2.425	2.50	2.575	VOLTS
SUPPLY CURRENT	$T_A = 25^\circ\text{C}$		7	8.7	mA
OUTPUT CURRENT SOURCE	$V_s > 4.5$	1mA		1.5mA	
SINK	$V_s > 4.5$.6mA		1.5mA	
SINK	$V_s > 5.0$	1mA		1.5mA	
RESPONSE TIME				3μs	
OUTPUT VOLTAGE SWING					
VOM -	-B APPLIED	.4	.2		VOLTS
VOM +	+B APPLIED	$V_s - .4$	$V_s - .2$		VOLTS
B LIMITS FOR LINEAR OPERATION	-B MAX	-750	-840		GAUSS
	+B MAX	+750	+840		GAUSS
Vnull DRIFT	$B = 0, T_A = 25^\circ\text{C TO } 125^\circ\text{C}$			$\pm .032$	$\% / ^\circ\text{C}$
Vnull DRIFT	$B = 0, T_A = +125^\circ\text{C TO } +150^\circ\text{C}$			$\pm .064$	$\% / ^\circ\text{C}$
SENSITIVITY DRIFT	$T_A = +25^\circ\text{C TO } +125^\circ\text{C}$			$\pm .05$	$\% / ^\circ\text{C}$
SENSITIVITY DRIFT	$T_A = -40^\circ\text{C TO } +25^\circ\text{C}$			$\pm .06$	$\% / ^\circ\text{C}$
SENSITIVITY DRIFT	$T_A = +125^\circ\text{C TO } +150^\circ\text{C}$			$\pm .08$	$\% / ^\circ\text{C}$
LINEARITY	$B = -6.00 \text{ TO } +6.00$	0	-1.0	-1.5	$\% \text{ OF SPAN}$
SUPPLY VOLTAGE	$-40^\circ\text{C TO } +125^\circ\text{C}$	4.5	5.0	10.5	VOLTS
OPERATING TEMP	SEE MAX TEMPERATURE CHART	-40		+150	$^\circ\text{C}$

BLOCK DIAGRAM CURRENT SINKING OR SOURCING OUTPUT



ABSOLUTE MAXIMUM CHARACTERISTICS

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	MAX	UNITS
SUPPLY VOLTAGE	V_{cc}		-0.5	11	V
OUTPUT VOLTAGE	V_{out}		-0.5	11	V
OUTPUT CURRENT	I_{out}	SOURCE OR SINK		10	mA
TEMPERATURE	T_A	OPERATING	-55	150	$^\circ\text{C}$
	T_s	STORAGE ($V_{cc}=0$)	-55	165	$^\circ\text{C}$



CAUTION
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CLASS 3

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MICRO SWITCH
a Honeywell Division
MINIATURE RATIO-METRIC
LINEAR HALL EFFECT SENSOR
CATALOG LISTING
SS496 SERIES CHART 1

THIRD ANGLE PROJECTION
SCALE: NONE
DO NOT SCALE PRINT
UNLESS OTHERWISE SPECIFIED TOLERANCES ARE:
ONE PLACE (L0) ±.030
TWO PLACES (L00) ±.015
THREE PLACES (L000) ±.005
ANGLES ±2°
WEIGHT

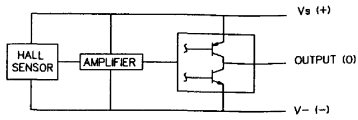
REVISION NUMBER: 10
 SS496 SERIES CHART 1
 OF 3
 PAGE 3
 REVISED: 10/03/01
 BY: J.A.F./T.E.P./P.B.
 CHECKED: K.L.G./B.S.C./S.B.
 DRAWN: R.M.
 PART NUMBER: 100796-SS
 REV. 10/03/01

CHARACTERISTICS ARE AT $V_s=5.00$ WITH 4.7K OUTPUT TO MINUS WITH $T_A=-40^{\circ}\text{C}$ TO $+125^{\circ}\text{C}$ UNLESS OTHERWISE SPECIFIED

SS496B

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
SENSITIVITY	$T_A = 25^{\circ}\text{C}$	2.300	2.500	2.700	mV/GAUSS
	$T_A = 25^{\circ}\text{C}$	2.350	2.50	2.650	VOLTS
NULL	$T_A = 25^{\circ}\text{C}$		7	8.7	mA
SUPPLY CURRENT	$T_A = 25^{\circ}\text{C}$				
OUTPUT CURRENT SOURCE	$V_s > 4.5$	1mA	1.5mA		
	SINK $V_s > 4.5$		6mA	1.5mA	
	SINK $V_s > 5.0$		1mA	1.5mA	
RESPONSE TIME			3 μ S		
OUTPUT VOLTAGE SWING	-B APPLIED	-4	.2		VOLTS
	+B APPLIED	$V_s - .4$	$V_s - .2$		VOLTS
B LIMITS FOR LINEAR OPERATION	-B MAX	-750	-840		GAUSS
	+B MAX	+750	+840		GAUSS
V_{null} DRIFT	$B = 0, T_A = 25^{\circ}\text{ TO } 125^{\circ}\text{C}$	-0.64		+0.64	$\% / ^{\circ}\text{C}$
V_{null} DRIFT	$B = 0, T_A = +125^{\circ}\text{ TO } +150^{\circ}\text{C}$	-0.64		+0.64	$\% / ^{\circ}\text{C}$
SENSITIVITY DRIFT	$T_A = +25^{\circ}\text{C TO } +150^{\circ}\text{C}$	-0.02		+0.08	$\% / ^{\circ}\text{C}$
SENSITIVITY DRIFT	$T_A = -40^{\circ}\text{C TO } +25^{\circ}\text{C}$	-0.02		+0.08	$\% / ^{\circ}\text{C}$
LINEARITY	$B = -600 \text{ TO } +600$	0	-1.0	+1.5	$\%$ OF SPAN
SUPPLY VOLTAGE	$-40^{\circ}\text{C TO } +125^{\circ}\text{C}$	4.5	5.0	10.5	VOLTS
OPERATING TEMP	SEE MAX TEMPERATURE CHART	-40		+150	$^{\circ}\text{C}$

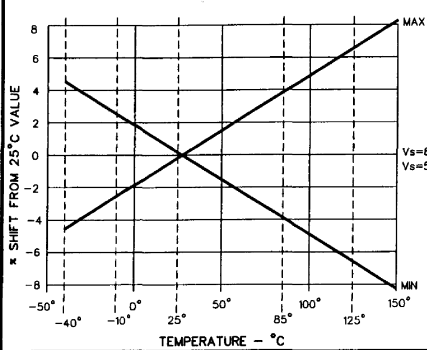
BLOCK DIAGRAM CURRENT SINKING OR SOURCING OUTPUT



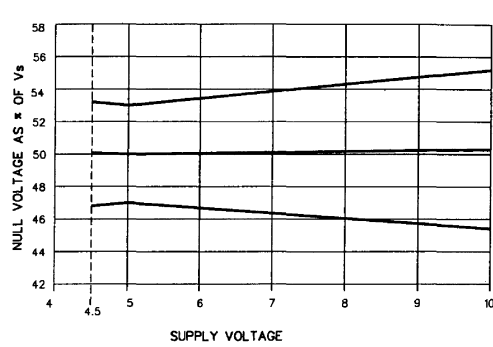
ABSOLUTE MAXIMUM CHARACTERISTICS

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	MAX	UNITS
SUPPLY VOLTAGE	V_{cc}		-0.5	11	V
OUTPUT VOLTAGE	V_{out}		-0.5	11	V
OUTPUT CURRENT	I_{out}	SOURCE OR SINK		10	mA
TEMPERATURE	T_A	OPERATING	-55	150	$^{\circ}\text{C}$
	T_s	STORAGE ($V_{cc}=0$)	-55	165	$^{\circ}\text{C}$

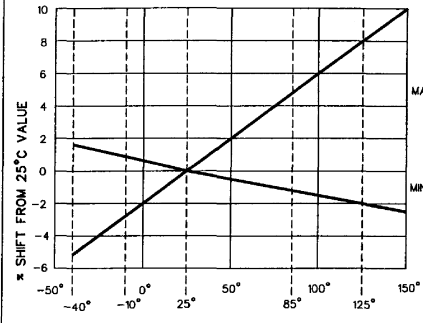
NULL SHIFT VERSUS TEMPERATURE



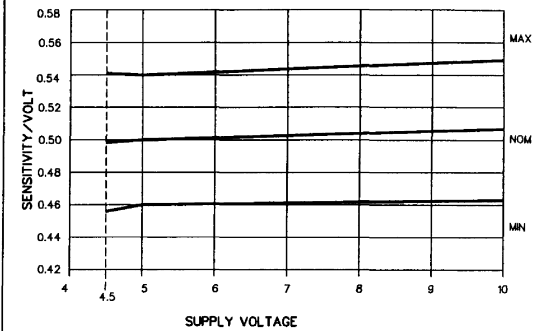
RATIO OF V_{null} TO V_s



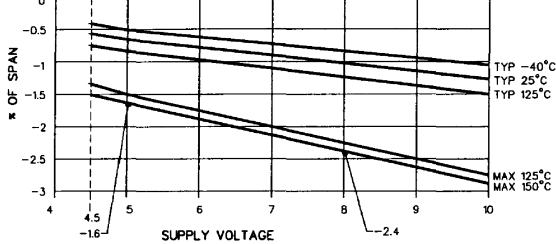
SENSITIVITY SHIFT VERSUS TEMPERATURE



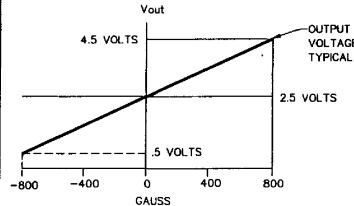
SENSITIVITY/V VERSUS V_s (mV/GAUSS/VOLTI)



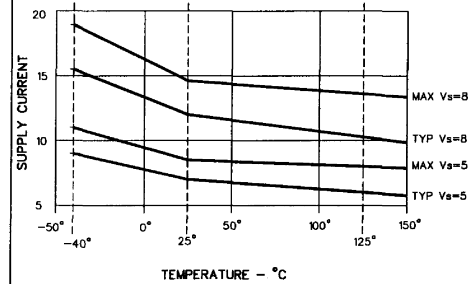
LINEARITY VERSUS V_s END POINT OF SPAN METHOD



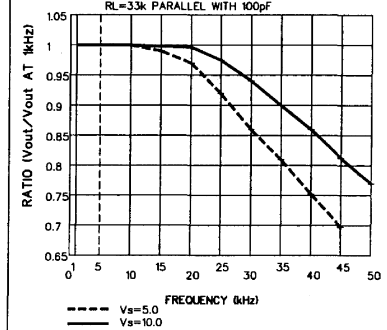
TRANSFER CHARACTERISTICS AT $V_s=5.0$ VDC



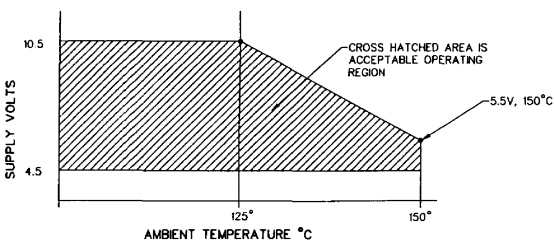
SUPPLY CURRENT VERSUS TEMPERATURE



TYPICAL FREQUENCY RESPONSE



MAXIMUM ALLOWABLE AMBIENT TEMPERATURE



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Micro Switch
MINIATURE RATIO-METRIC
LINEAR HALL EFFECT SENSOR

THIRD ANGLE PROJECTION		
SCALE	NONE	
DO NOT SCALE PRINT		
UNLESS OTHERWISE SPECIFIED TOLERANCES ARE		
ONE PLACE	(0)	±0.030
TWO PLACES	(00)	±0.015
THREE PLACES	(000)	±0.005
ANGLES		±2'
WEIGHT		

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