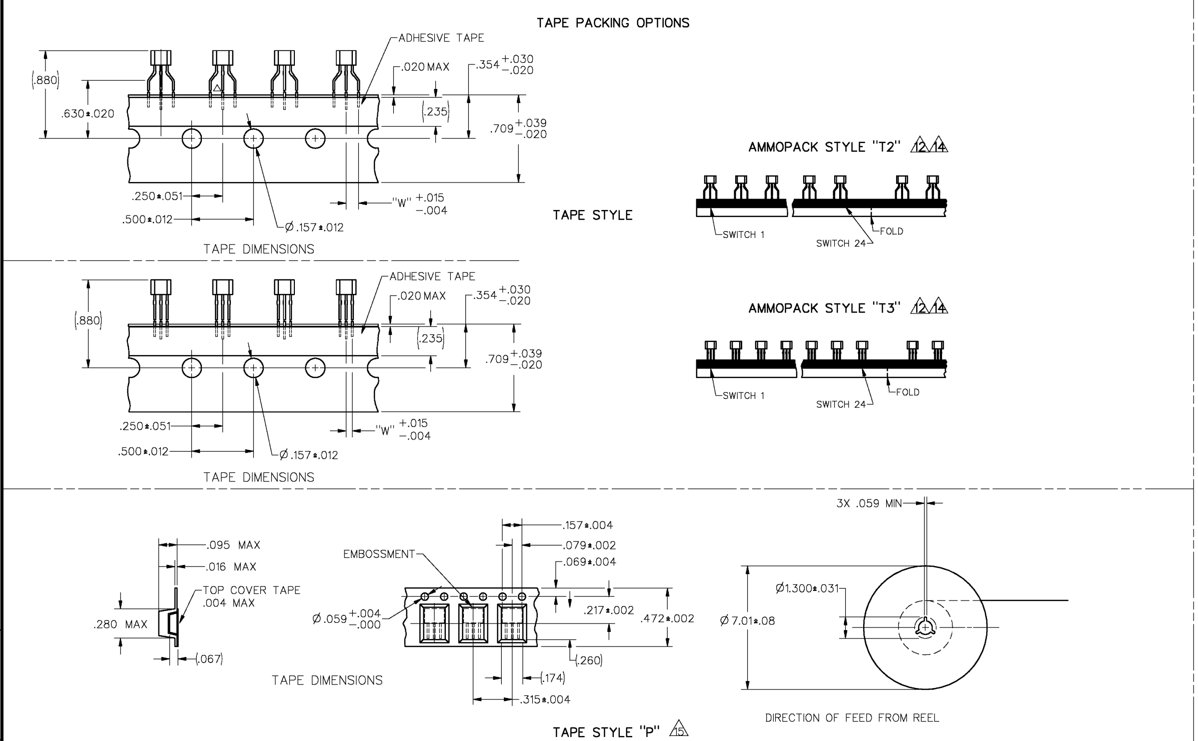
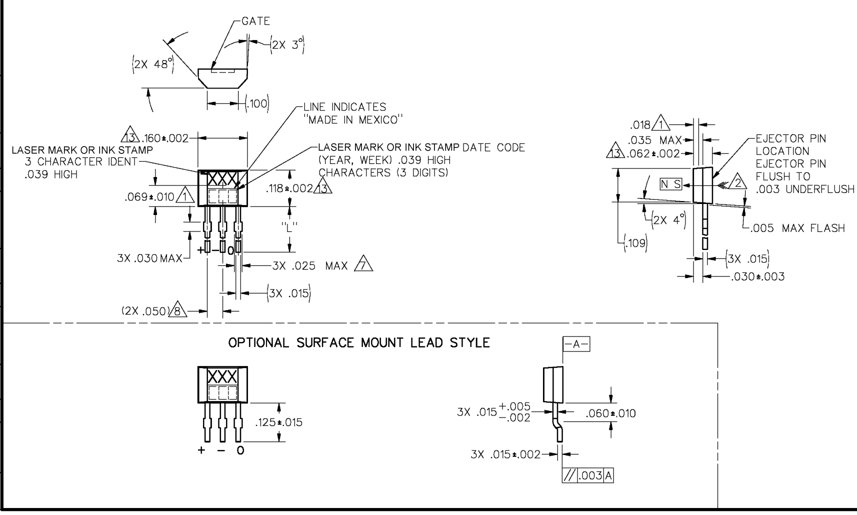
TAPE PACKING OPTIONS





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 – OUTPUT TYPE – RATIOMETRIC
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 PEAK FOR 10 S MAX OR 260°C PEAK FOR 5 S MAX
7. (△) BURRS ARE ALLOWED ONLY IF FULL LENGTH OF LEADS WILL PASS THROUGH Ø.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. (△) AMMOPACK STYLE "T2" & "T3". 24 SWITCHES BETWEEN FOLDS, SKIP 1 SPACE AT FOLD. MAY BE REFERRED TO AS "FAN FOLD"
13. (△) MOLDED PART DIMENSIONS DO NOT INCLUDE FLASH. FLASH IS LIMITED TO .005 MAXIMUM
14. (△) TAPE AND AMMOPACK PER EIA-468
15. (△) POCKET TAPE PER EIA-481

CATALOG LISTING	TAPE STYLE	DIM "L" ±.015	DIM "W" +.015 −.004	COMMENTS (△11)
SS496A	NONE	.590	.050	BULK-1000/BAG
SS496A-T2	T2	.590	.100	5000/BOX
SS496A-T3	T3	.590	.050	5000/BOX
SS496A-S	NONE	.125	.050	BULK-1000/BAG
SS496A-SP	P	.125	.050	1000/PACKET TAPE AND REEL
SS496A1	NONE	.590	.050	BULK-1000/BAG
SS496A1-T2	T2	.590	.100	5000/BOX
SS496A1-T3	T3	.590	.050	5000/BOX
SS496A1-S	NONE	.125	.050	BULK-1000/BAG
SS496A1-SP	P	.125	.050	1000/PACKET TAPE AND REEL
SS496B	**NONE**	**.590**	**.050**	**BULK-1000/BAG**
SS496B-F	**NONE**	**.590**	**.100**	**BULK-1000/BAG**
SS496B-T2	**T2**	**.590**	**.100**	**5000/BOX**
SS496B-T3	**T3**	**.590**	**.050**	**5000/BOX**
SS496B-S	**NONE**	**.125**	**.050**	**BULK-1000/BAG**
SS496B-SP	**P**	**.125**	**.050**	**1000/PACKET TAPE AND REEL**

CAUTION ELECTROSTATIC SENSITIVE DEVICES
ESD SENSITIVITY: CLASS 3

MASTER REDUCED
ANSI Y14.5M–1982 APPLIES

FED. MFG. CODE 91929
MICRO SWITCH a Honeywell Division

MINIATURE RATIOMETRIC LINEAR HALL EFFECT SENSOR

CATALOG LISTING: SS496 SERIES CHART 1

THIRD ANGLE PROJECTION
SCALE 5 : 1
DO NOT SCALE PRINT

UNLESS OTHERWISE SPECIFIED TOLERANCES ARE		
ONE PLACE	(.0)	±.030
TWO PLACES	(.00)	±.015
THREE PLACES	(.000)	±.005
ANGLES		± 2°

WEIGHT

ISSUE	DRAWING NUMBER	RELEASE NO.	REPLACES
10	M SS496 SERIES CHART 1, PAGE 1 OF 4	PR-22400	X100795-SS

RASTER DRAWN	CHECK	CHECK	CHECK
J A F 5SEP96	J A F 5 SEP 96	R.M. 21 JUN 10	

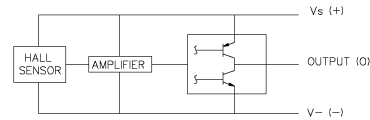
REVISIONS: H 0034535 PRS 26 OCT 07; I 0063540 R.M. 21 JUN 10

SS496A

CHARACTERISTICS ARE AT Vs=5.00 WITH 4.7K OUTPUT TO MINUS WITH TA= −40°C TO +125°C UNLESS OTHERWISE SPECIFIED

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
SENSITIVITY	TA = 25°C	2.4	2.5	2.6	mV/GAUSS
NULL	TA = 25°C	2.425	2.50	2.575	VOLTS
SUPPLY CURRENT	TA = 25°C		7	8.7	mA
OUTPUT CURRENT SOURCE	Vs > 4.5	1mA	1.5mA		
SINK	Vs > 4.5	.6mA	1.5mA		
SINK	Vs > 5.0	1mA	1.5mA		
RESPONSE TIME			3μS		
OUTPUT VOLTAGE SWING					
VOM −	−B APPLIED	.4	.2		VOLTS
VOM +	+B APPLIED	Vs −.4	Vs −.2		VOLTS
B LIMITS FOR LINEAR	−B MAX	−750	−840		GAUSS
OPERATION	+B MAX	+750	+840		GAUSS
Vnull DRIFT	B = 0, TA = 25°C TO 125°C	−.048		+.048	% /°C
Vnull DRIFT	B = 0, TA = +125°C TO +150°C	−.064		+.064	% /°C
SENSITIVITY DRIFT	TA=+25°C TO +125°C	−.01		+.05	% /°C
SENSITIVITY DRIFT	TA=−40°C TO +25°C	0		+.06	% /°C
LINEARITY	B = −600 TO +600	0	−1.0	−1.5	% OF SPAN
SUPPLY VOLTAGE	−40°C TO +125°C	4.5	5.0	10.5	VOLTS
OPERATING TEMP	SEE MAX TEMPERATURE CHART	−40		+150	°C

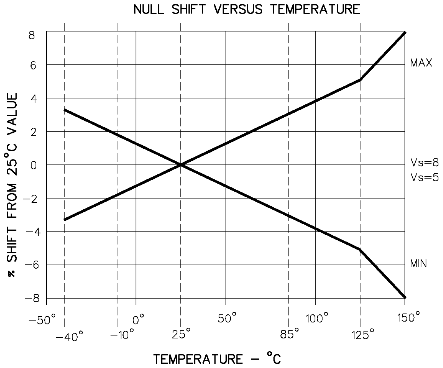
BLOCK DIAGRAM CURRENT SINKING OR SOURCING OUTPUT



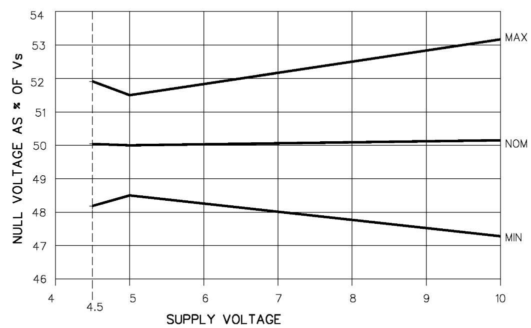
ABSOLUTE MAXIMUM CHARACTERISTICS (10)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	MAX	UNITS
SUPPLY VOLTAGE	Vcc		−0.5	11	V
OUTPUT VOLTAGE	Vout		−0.5	11	V
OUTPUT CURRENT	Iout	SOURCE OR SINK		10	mA
TEMPERATURE	TA	OPERATING	−55	150	°C
	Ts	STORAGE (Vcc=0)	−55	165	°C

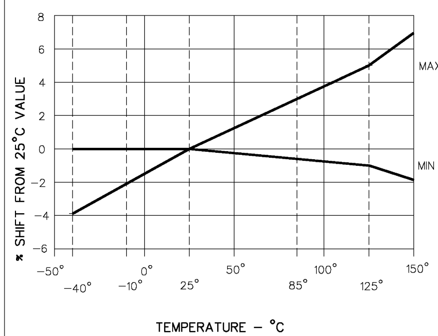
NULL SHIFT VERSUS TEMPERATURE



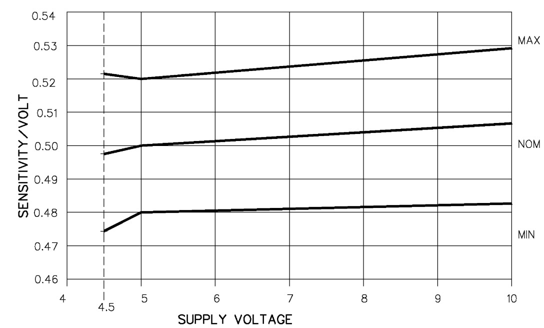
RATIO OF Vnull TO Vs



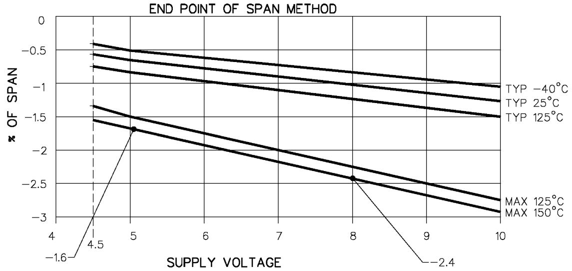
SENSITIVITY SHIFT VERSUS TEMPERATURE



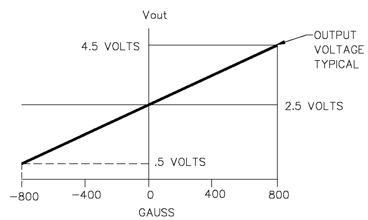
SENSITIVITY/V VERSUS Vs
(mV/GAUSS/VOLT)



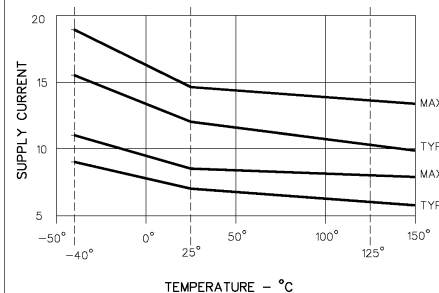
LINEARITY VERSUS Vs
END POINT OF SPAN METHOD



TRANSFER CHARACTERISTICS AT Vs=5.0 VDC

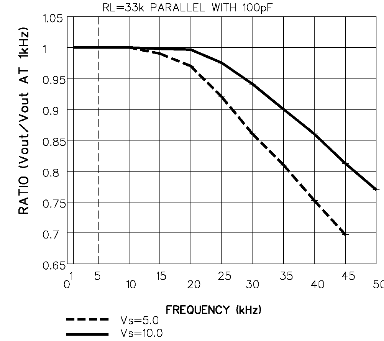


SUPPLY CURRENT VERSUS TEMPERATURE

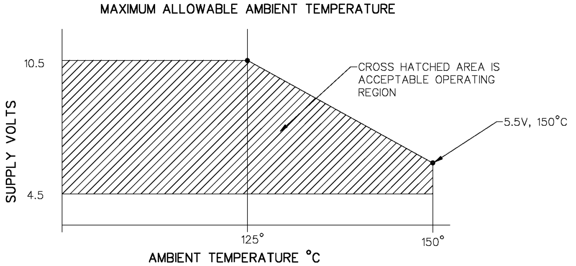


TYPICAL FREQUENCY RESPONSE

RL=33k PARALLEL WITH 100pF



MAXIMUM ALLOWABLE AMBIENT TEMPERATURE



CAUTION ELECTROSTATIC SENSITIVE DEVICES
ESD SENSITIVITY: CLASS 3

MASTER REDUCED
ANSI Y14.5M−1982 APPLIES

FED. MFG. CODE 91929
MICRO SWITCH a Honeywell Division

MINIATURE RATIOMETRIC 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	(.0)	±.030
TWO PLACES	(.00)	±.015
THREE PLACES	(.000)	±.005
ANGLES		± 2°

WEIGHT

ISSUE 10 M DRAWING NUMBER SS496 SERIES CHART 1
PAGE 2 OF 4
RELEASE NO. PR-22400 REPLACES X100795-SS

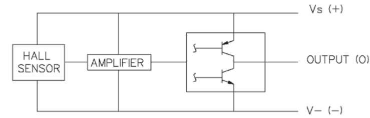
REVISIONS
H 0034535 PRS 26 OCT 07
I 0063540 FM 21 JUN 10

DRAWN J A F 15SEP96 CHECK K A G 18 DEC 96 R.M. 21 JUN 10
RASTER

CHARACTERISTICS ARE AT Vs=5.00 WITH 4.7K OUTPUT TO MINUS WITH TA= −40°C TO +125°C UNLESS OTHERWISE SPECIFIED

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
SENSITIVITY	TA = 25°C	2.425	2.500	2.575	mV/GAUSS
NULL	TA = 25°C	2.425	2.50	2.575	VOLTS
SUPPLY CURRENT	TA = 25°C		7	8.7	mA
OUTPUT CURRENT SOURCE	Vs > 4.5	1mA	1.5mA		
SINK	Vs > 4.5	.6mA	1.5mA		
SINK	Vs > 5.0	1mA	1.5mA		
RESPONSE TIME			3µS		
OUTPUT VOLTAGE SWING					
VOM −	−B APPLIED	.4	.2		VOLTS
VOM +	+B APPLIED	Vs −.4	Vs −.2		VOLTS
B LIMITS FOR LINEAR	−B MAX	−750	−840		GAUSS
OPERATION	+B MAX	+750	+840		GAUSS
Vnull DRIFT	B = 0, TA = 25° TO 125°C	−.032		+.032	% /°C
Vnull DRIFT	B = 0, TA = +125° TO +150°C	−.064		+.064	% /°C
SENSITIVITY DRIFT	TA=+25°C TO + 125°C	−.01		+.05	% /°C
SENSITIVITY DRIFT	TA=−40°C TO +25°C	0		+.06	% /°C
SENSITIVITY DRIFT	TA=+125°C TO +150°C	−.04		+.08	% /°C
LINEARITY	B = −600 TO +600	0	−1.0	−1.5	% OF SPAN
SUPPLY VOLTAGE	−40°C TO +125°C	4.5	5.0	10.5	VOLTS
OPERATING TEMP	SEE MAX TEMPERATURE CHART	−40		+150	°C

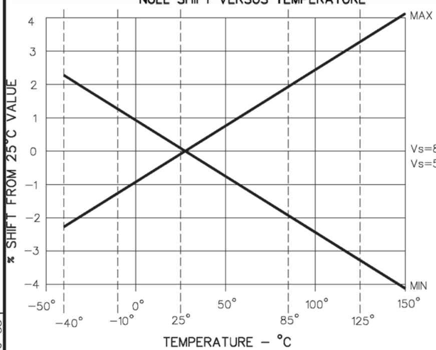
BLOCK DIAGRAM CURRENT SINKING OR SOURCING OUTPUT



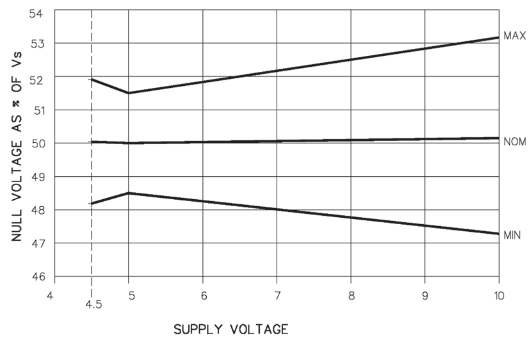
ABSOLUTE MAXIMUM CHARACTERISTICS (10)

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	MAX	UNITS
SUPPLY VOLTAGE	Vcc		−0.5	11	V
OUTPUT VOLTAGE	Vout		−0.5	11	V
OUTPUT CURRENT	Iout	SOURCE OR SINK		10	mA
TEMPERATURE	TA	OPERATING	−55	150	°C
	Ts	STORAGE (Vcc=0)	−55	165	°C

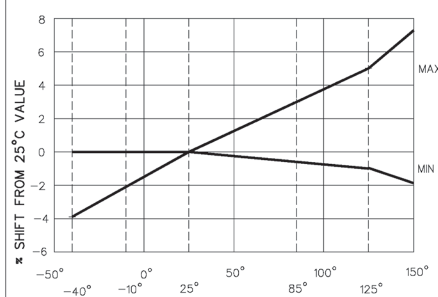
NULL SHIFT VERSUS TEMPERATURE



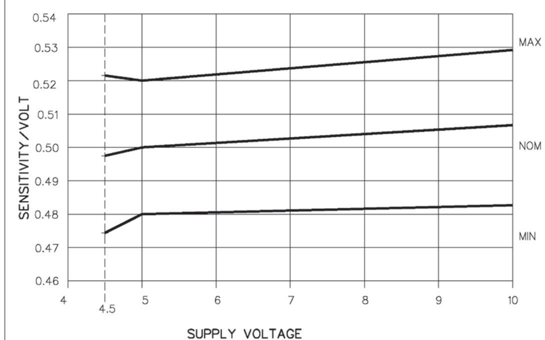
RATIO OF Vnull TO Vs



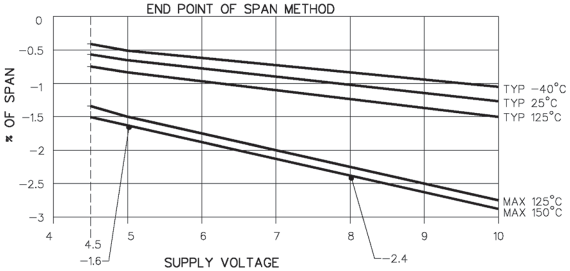
SENSITIVITY SHIFT VERSUS TEMPERATURE



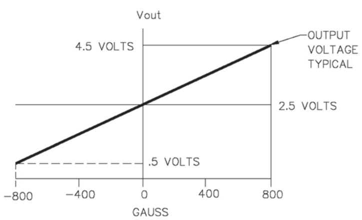
SENSITIVITY/V VERSUS Vs
(mV/GAUSS/VOLT)



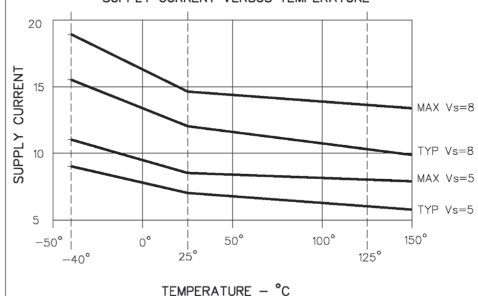
LINEARITY VERSUS Vs
END POINT OF SPAN METHOD



TRANSFER CHARACTERISTICS AT Vs=5.0 VDC

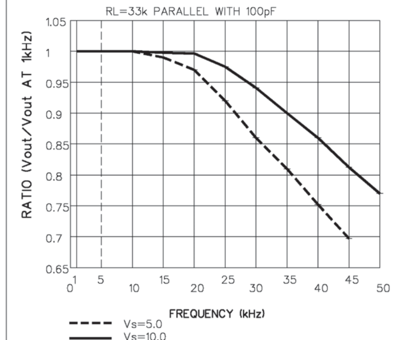


SUPPLY CURRENT VERSUS TEMPERATURE

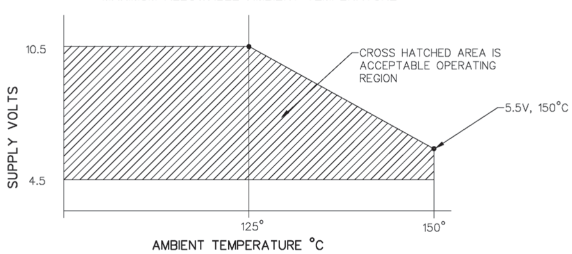


TYPICAL FREQUENCY RESPONSE

RL=33k PARALLEL WITH 100pF



MAXIMUM ALLOWABLE AMBIENT TEMPERATURE



CAUTION ELECTROSTATIC SENSITIVE DEVICES
ESD SENSITIVITY: CLASS 3

MASTER REDUCED
ANSI Y14.5M−1982 APPLIES

FED. MFG. CODE 91929
MICRO SWITCH a Honeywell Division

MINIATURE RATIOMETRIC 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	(.0)	±.030
TWO PLACES	(.00)	±.015
THREE PLACES	(.000)	±.005
ANGLES		±2°

WEIGHT

REVISIONS
H 0034535
I 0063545 21 JUN 10
RASTER
DRAWN J A F 5SEP96
CHECK K A G 18DEC98

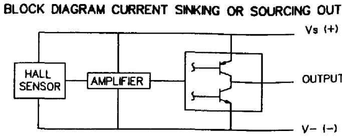
SS496B

M SS496 SERIES CHART 1

CHARACTERISTICS ARE AT Vs=5.00 WITH 4.7K OUTPUT TO MINUS WITH TA= −40°C TO +125°C UNLESS OTHERWISE SPECIFIED

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
SENSITIVITY	TA = 25°C	2.300	2.500	2.700	mV/GAUSS
NULL	TA = 25°C	2.350	2.50	2.650	VOLTS
SUPPLY CURRENT	TA = 25°C		7	8.7	mA
OUTPUT CURRENT SOURCE	Vs > 4.5	1mA	1.5mA		
SINK	Vs > 4.5	.6mA	1.5mA		
SINK	Vs > 5.0	1mA	1.5mA		
RESPONSE TIME			3µS		
OUTPUT VOLTAGE SWING					
VOM −	−B APPLIED	.4	.2		VOLTS
VOM +	+B APPLIED	Vs −.4	Vs −.2		VOLTS
B LIMITS FOR LINEAR	−B MAX	−750	−840		GAUSS
OPERATION	+B MAX	+750	+840		GAUSS
Vnull DRIFT	B = 0, TA = 25° TO 125°C	−.064		+.064	% /°C
Vnull DRIFT	B = 0, TA = +125° TO +150°C	−.064		+.064	% /°C
SENSITIVITY DRIFT	TA=+25°C TO +150°C	−.02		+.08	% /°C
SENSITIVITY DRIFT	TA=−40°C TO +25°C	−.02		+.08	% /°C
LINEARITY	B = −600 TO +600	0	−1.0	−1.5	% OF SPAN
SUPPLY VOLTAGE	−40°C TO +125°C	4.5	5.0	10.5	VOLTS
OPERATING TEMP	SEE MAX TEMPERATURE CHART	−40		+150	°C

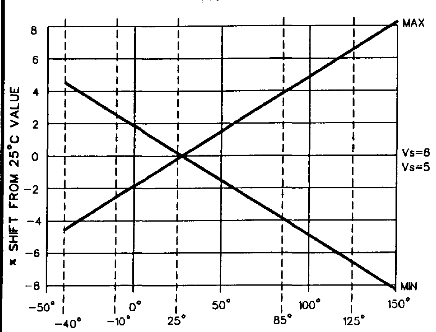
BLOCK DIAGRAM CURRENT SINKING OR SOURCING OUTPUT



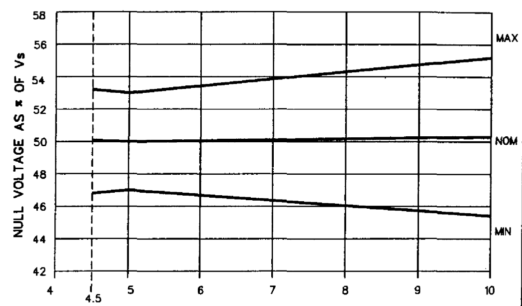
ABSOLUTE MAXIMUM CHARACTERISTICS ⚠10

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	MAX	UNITS
SUPPLY VOLTAGE	Vcc		−0.5	11	V
OUTPUT VOLTAGE	Vout		−0.5	11	V
OUTPUT CURRENT	Iout	SOURCE OR SINK		10	mA
TEMPERATURE	TA	OPERATING	−55	150	°C
	Ts	STORAGE (Vcc=0)	−55	165	°C

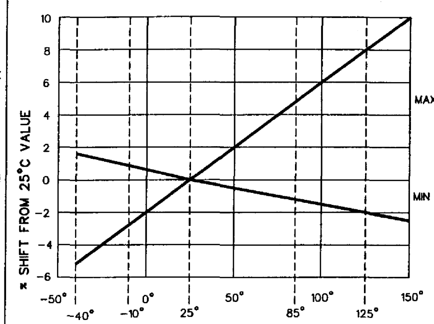
NULL SHIFT VERSUS TEMPERATURE



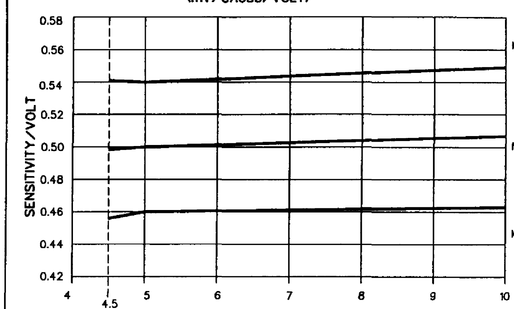
RATIO OF Vnull TO Vs



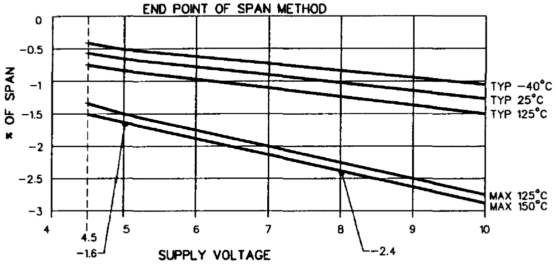
SENSITIVITY SHIFT VERSUS TEMPERATURE



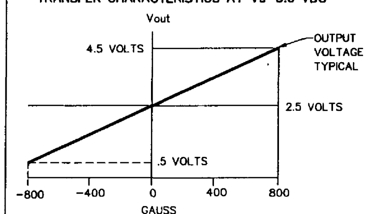
SENSITIVITY/V VERSUS Vs (mV/GAUSS/VOLT)



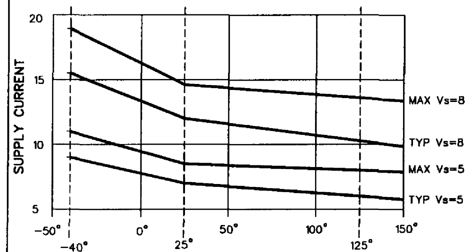
LINEARITY VERSUS Vs END POINT OF SPAN METHOD



TRANSFER CHARACTERISTICS AT Vs=5.0 VDC

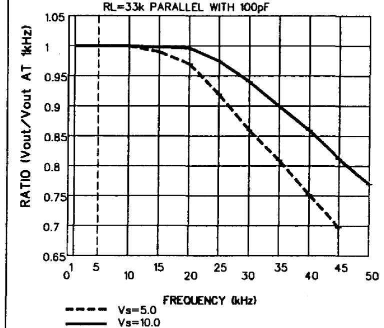


SUPPLY CURRENT VERSUS TEMPERATURE

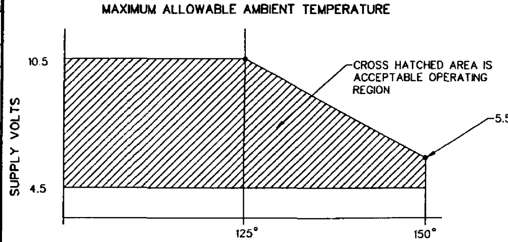


TYPICAL FREQUENCY RESPONSE

RL=33k PARALLEL WITH 100pF



MAXIMUM ALLOWABLE AMBIENT TEMPERATURE



CAUTION ESD SENSITIVITY: CLASS 3

MASTER REDUCED
ANSI Y14.5M−1982 APPLIES

MICRO SWITCH a Honeywell Division

MINIATURE RATIOMETRIC 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	(.0)	±.030
TWO PLACES	(.00)	±.015
THREE PLACES	(.000)	±.005
ANGLES		±2°

WEIGHT

M SS496 SERIES CHART 1 PAGE 4 OF 4 PR-24063 10

TSM 22JUN99 JAF 22JUN99 R.M. 21 JUN 10

RASTER