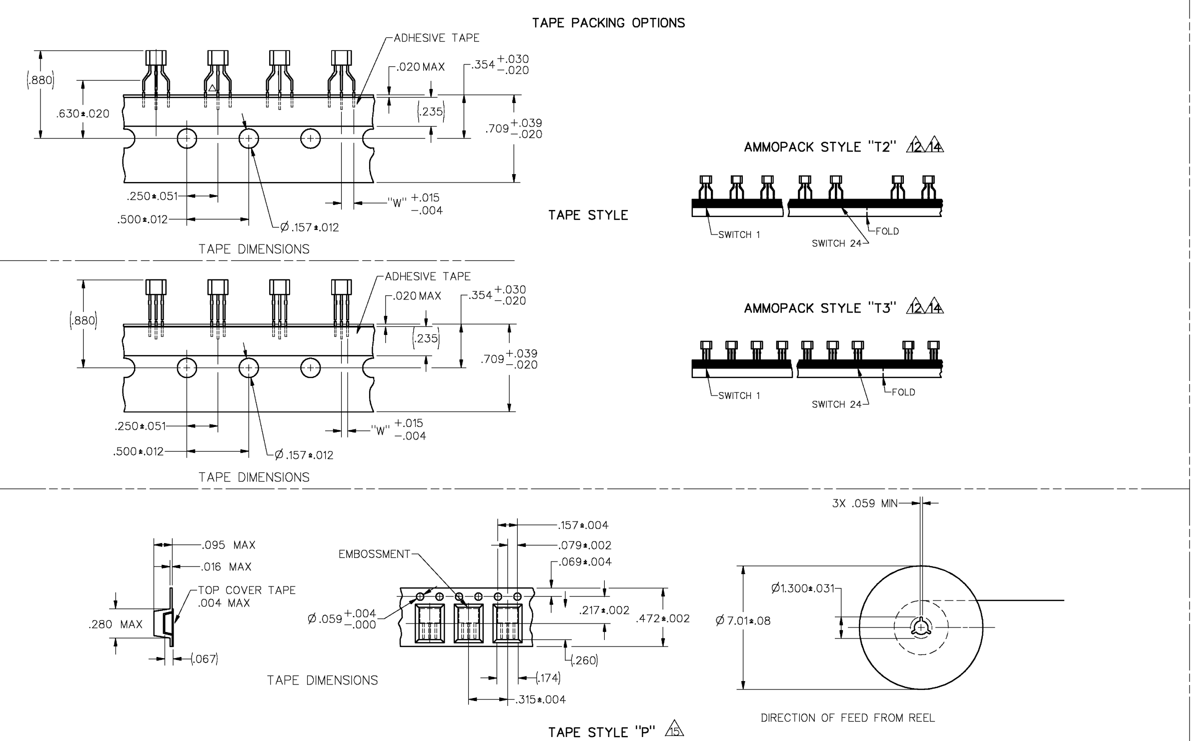
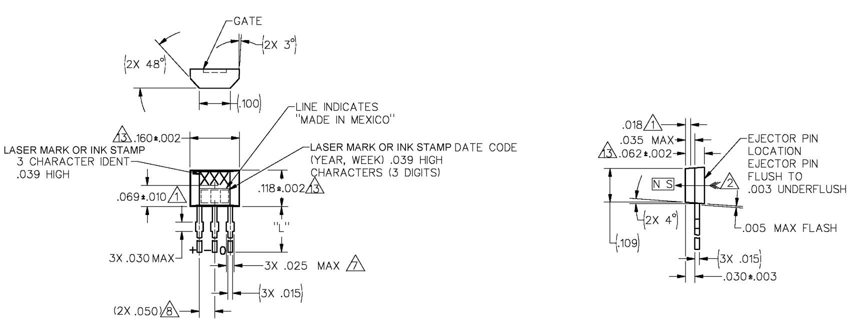
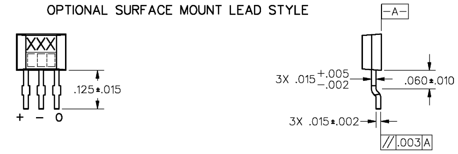




OPTIONAL SURFACE MOUNT LEAD STYLE



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 0R 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 10 — M — DRAWING NUMBER SS496 SERIES CHART 1, PAGE 1 OF 4
RELEASE NO. PR-22400 — REPLACES X100795-SS
REVISIONS: H 0034535 PRS 26 OCT 07; I 0063540 T.M. 21 JUN 10
RASTER — DRAWN J.A.F. 5SEP96 — CHECK J.A.F. 5 SEP 96 — CHECK R.M. 21 JUN 10

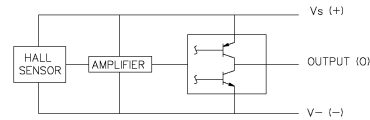
CHARACTERISTICS ARE AT Vs=5.00 WITH 4.7K OUTPUT TO MINUS WITH TA= −40°C TO +125°C UNLESS OTHERWISE SPECIFIED

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

SS496A

SS496 SERIES CHART 1

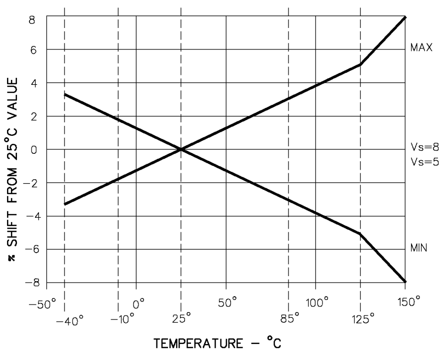
BLOCK DIAGRAM CURRENT SINKING OR SOURCING OUTPUT



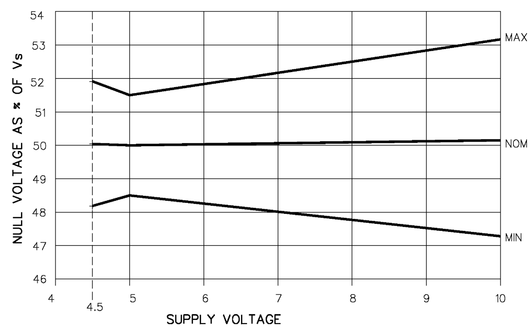
ABSOLUTE MAXIMUM CHARACTERISTICS (10)

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

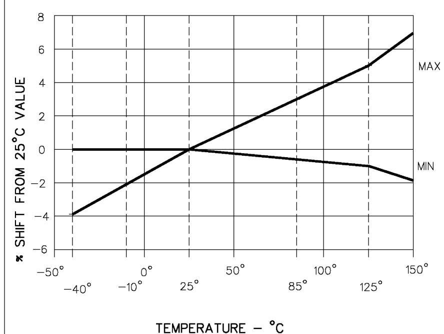
NULL SHIFT VERSUS TEMPERATURE



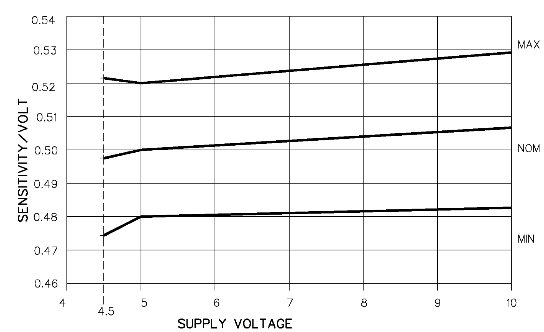
RATIO OF Vnull TO Vs



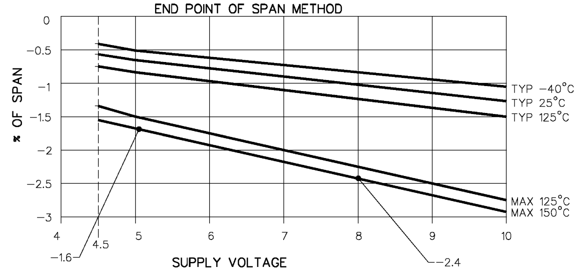
SENSITIVITY SHIFT VERSUS TEMPERATURE



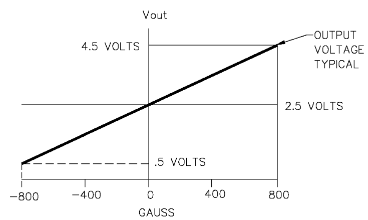
SENSITIVITY/V VERSUS Vs
(mV/GAUSS/VOLT)



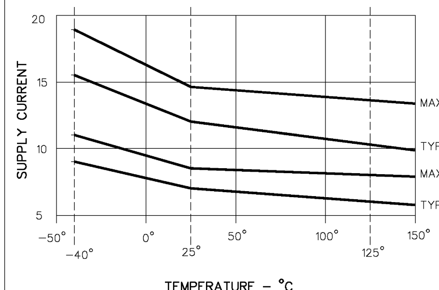
LINEARITY VERSUS Vs
END POINT OF SPAN METHOD



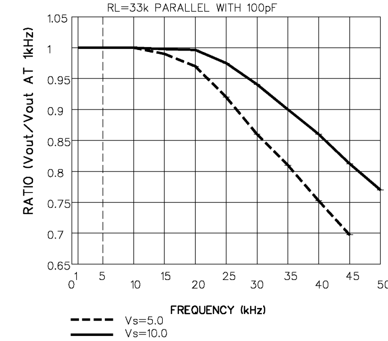
TRANSFER CHARACTERISTICS AT Vs=5.0 VDC



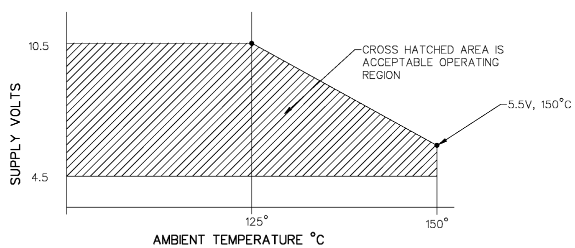
SUPPLY CURRENT VERSUS TEMPERATURE



TYPICAL FREQUENCY RESPONSE



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 25 OCT 07; I 0063546 FM 21 JUN 10

RASTER | DRAWN J A F 5SEP96 | CHECK K A G 18 DEC 96 | R.M. 21 JUN 10

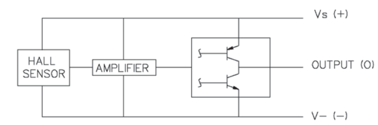
CHARACTERISTICS ARE AT Vs=5.00 WITH 4.7K OUTPUT TO MINUS WITH TA= −40°C TO +125°C UNLESS OTHERWISE SPECIFIED

SS496A1

M SS496 SERIES CHART 1

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

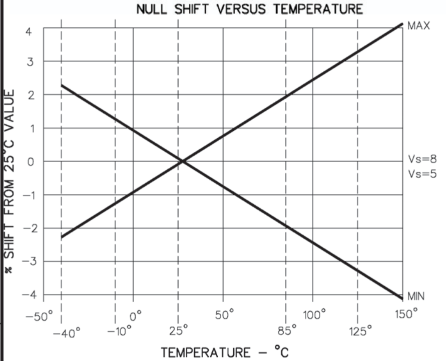
BLOCK DIAGRAM CURRENT SINKING OR SOURCING OUTPUT



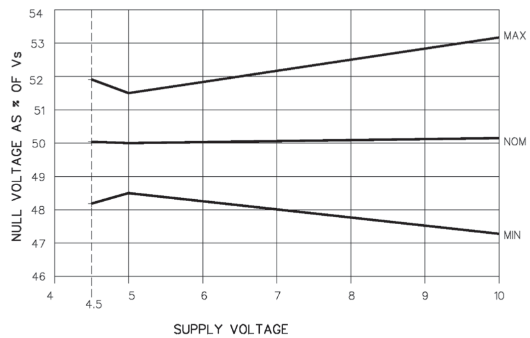
ABSOLUTE MAXIMUM CHARACTERISTICS △10

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

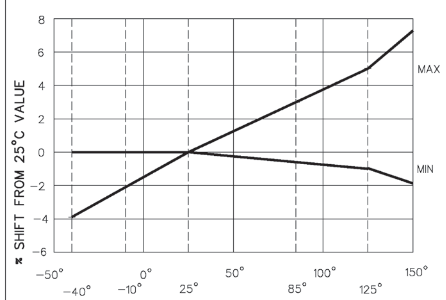
NULL SHIFT VERSUS TEMPERATURE



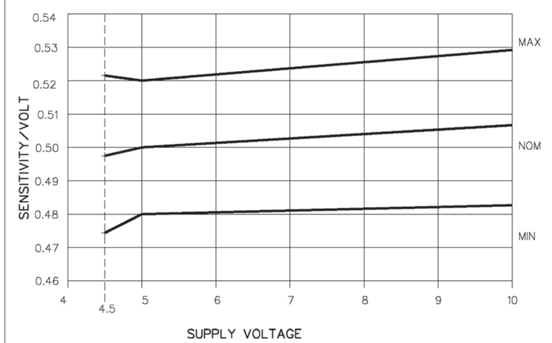
RATIO OF Vnull TO Vs



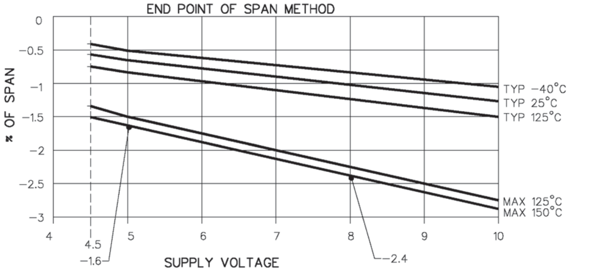
SENSITIVITY SHIFT VERSUS TEMPERATURE



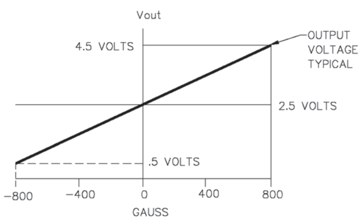
SENSITIVITY/V VERSUS Vs
(mV/GAUSS/VOLT)



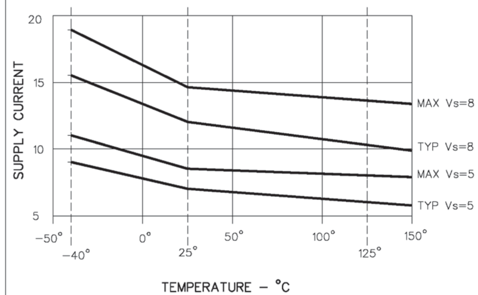
LINEARITY VERSUS Vs
END POINT OF SPAN METHOD



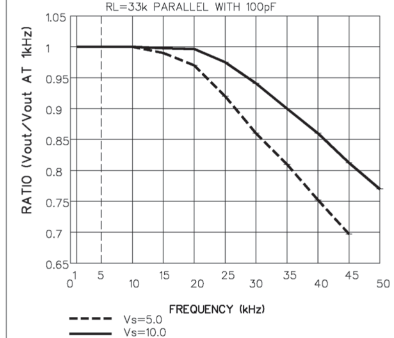
TRANSFER CHARACTERISTICS AT Vs=5.0 VDC



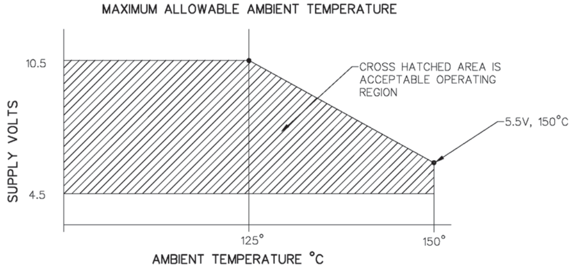
SUPPLY CURRENT VERSUS TEMPERATURE



TYPICAL FREQUENCY RESPONSE



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 3 OF 4 | RELEASE NO. PR−22400 | REPLACES X100796−SS

REVISIONS: H 0034535 PRB 26 OCT 01 | I 0063546 F.M. 21 JUN 10

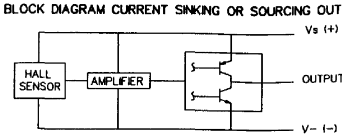
RASTER | DRAWN J A F 5SEP96 | CHECK K A G 18DEC98 | R.M. 21 JUN 10

SS496B

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

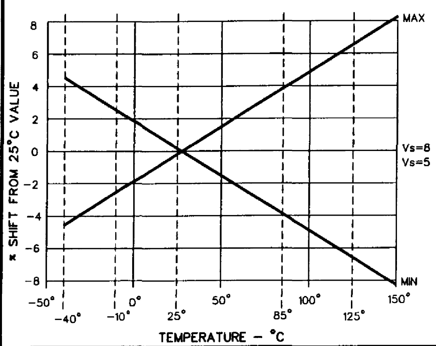
BLOCK DIAGRAM CURRENT SINKING OR SOURCING OUTPUT



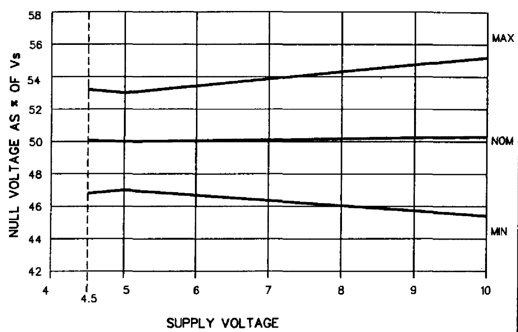
ABSOLUTE MAXIMUM CHARACTERISTICS

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

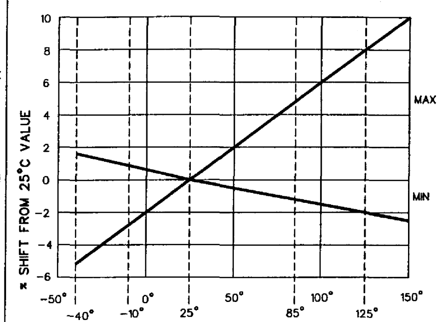
NULL SHIFT VERSUS TEMPERATURE



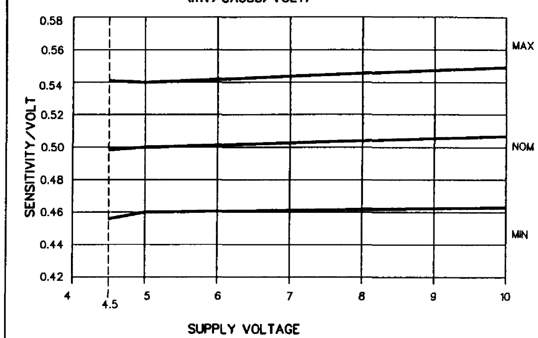
RATIO OF Vnull TO Vs



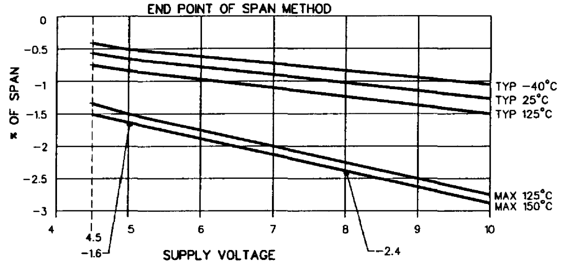
SENSITIVITY SHIFT VERSUS TEMPERATURE



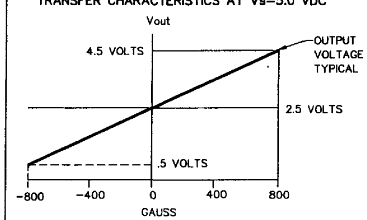
SENSITIVITY/V VERSUS Vs (mV/GAUSS/VOLT)



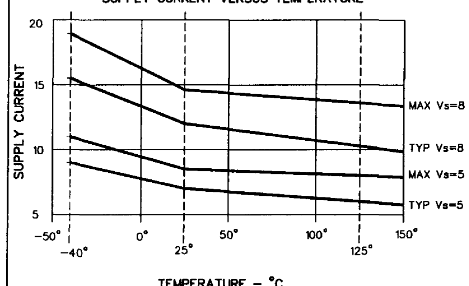
LINEARITY VERSUS Vs END POINT OF SPAN METHOD



TRANSFER CHARACTERISTICS AT Vs=5.0 VDC

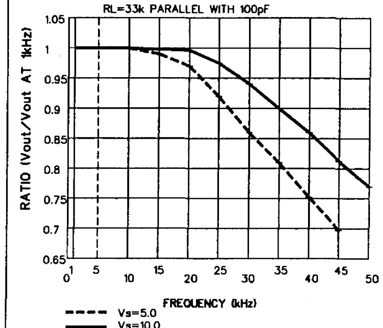


SUPPLY CURRENT VERSUS TEMPERATURE

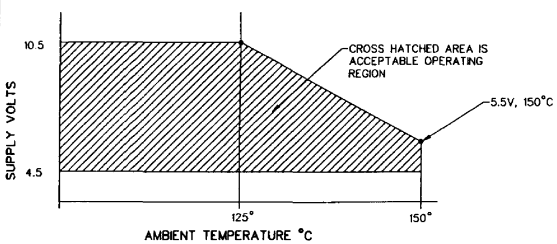


TYPICAL FREQUENCY RESPONSE

RL=33k PARALLEL WITH 100pF



MAXIMUM ALLOWABLE AMBIENT TEMPERATURE



CAUTION ELECTROSTATIC SENSITIVE DEVICES
ESD SENSITIVITY: CLASS 3

MASTER REDUCED
ANSI Y14.5M−1982 APPLIES

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

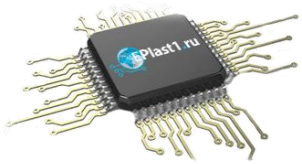
Компания «ЭлектроПласт» предлагает заключение долгосрочных отношений при поставках импортных электронных компонентов на взаимовыгодных условиях!

Наши преимущества:

- Оперативные поставки широкого спектра электронных компонентов отечественного и импортного производства напрямую от производителей и с крупнейших мировых складов;
- Поставка более 17-ти миллионов наименований электронных компонентов;
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- Лицензия ФСБ на осуществление работ с использованием сведений, составляющих государственную тайну;
- Поставка специализированных компонентов (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Aeroflex, Peregrine, Syfer, Eurofarad, Texas Instrument, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits,General Dynamics и др.);

Помимо этого, одним из направлений компании «ЭлектроПласт» является направление «Источники питания». Мы предлагаем Вам помощь Конструкторского отдела:

- Подбор оптимального решения, техническое обоснование при выборе компонента;
- Подбор аналогов;
- Консультации по применению компонента;
- Поставка образцов и прототипов;
- Техническая поддержка проекта;
- Защита от снятия компонента с производства.



Как с нами связаться

Телефон: 8 (812) 309 58 32 (многоканальный)
Факс: 8 (812) 320-02-42
Электронная почта: org@eplast1.ru
Адрес: 198099, г. Санкт-Петербург, ул. Калинина, дом 2, корпус 4, литера А.