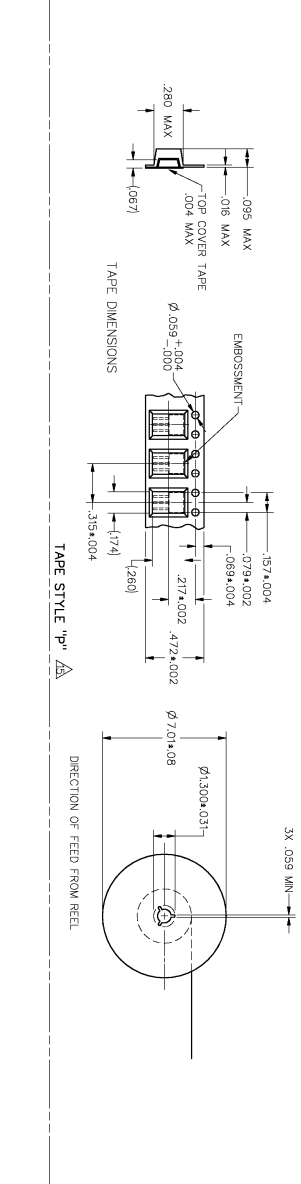


- MS436 SERIES CHART

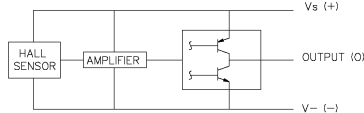
CHARACTERISTICS ARE AT  $V_s=5.00$  WITH 4.7K OUTPUT TO MINUS WITH  $T_A = -40^\circ\text{C}$  TO  $+125^\circ\text{C}$  UNLESS OTHERWISE SPECIFIED

SS496A

SS496 SERIES CHART 1

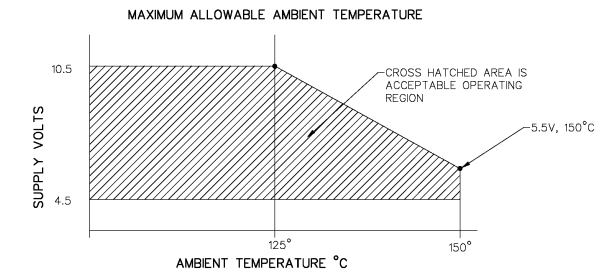
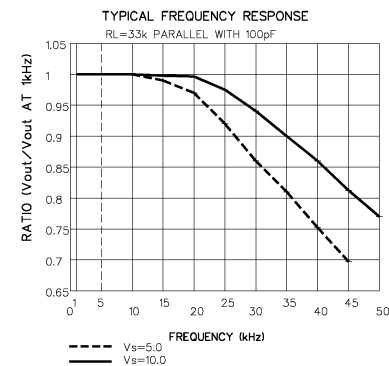
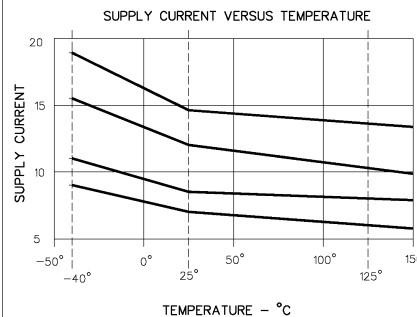
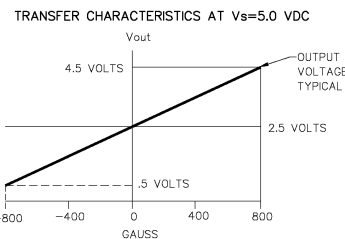
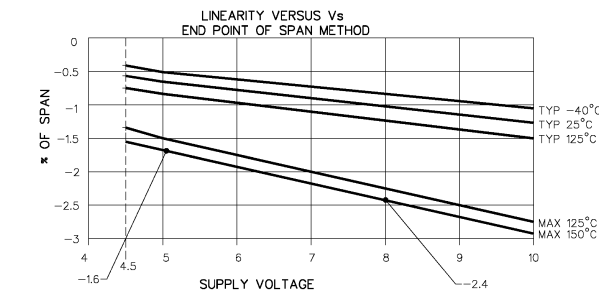
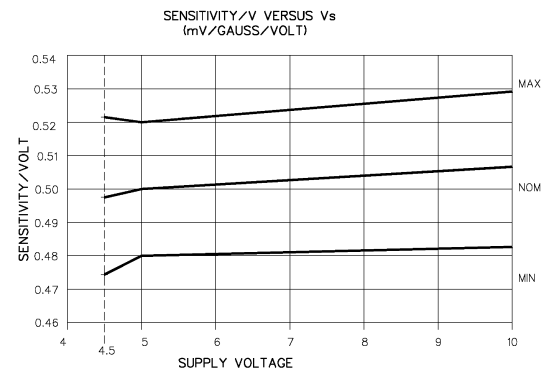
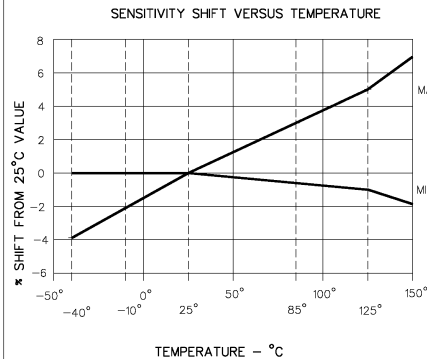
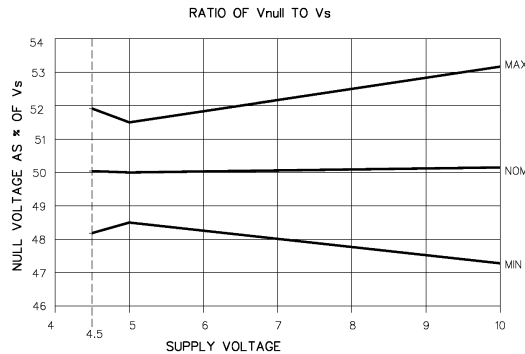
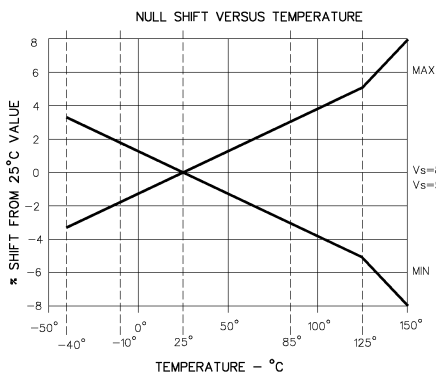
| PARAMETER                     | CONDITIONS                                                | MIN        | TYP        | MAX   | UNITS     |
|-------------------------------|-----------------------------------------------------------|------------|------------|-------|-----------|
| SENSITIVITY                   | $T_A = 25^\circ\text{C}$                                  | 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      |       |           |
| 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 $125^\circ\text{C}$    | - .048     |            |       | % / °C    |
| Vnull DRIFT                   | $B = 0, T_A = +125^\circ\text{C}$ TO $+150^\circ\text{C}$ | - .064     |            |       | % / °C    |
| SENSITIVITY DRIFT             | $T_A = +25^\circ\text{C}$ TO $+125^\circ\text{C}$         | - .01      |            |       | % / °C    |
| SENSITIVITY DRIFT             | $T_A = -40^\circ\text{C}$ TO $+25^\circ\text{C}$          | 0          |            |       | % / °C    |
| LINEARITY                     | $B = -600$ TO $+600$                                      | 0          | -1.0       |       | % 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  | °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   | 10  | mA    |
| TEMPERATURE    | $T_A$     | OPERATING              | -55  | 150 | °C    |
|                | $T_s$     | STORAGE ( $V_{cc}=0$ ) | -55  | 165 | °C    |



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**MICRO SWITCH**  
 a Honeywell Division

MINIATURE RATIOMETRIC  
 LINEAR HALL EFFECT SENSOR

SS496 SERIES CHART 1

|                                           |       |       |  |
|-------------------------------------------|-------|-------|--|
| THIRD ANGLE PROJECTION                    |       |       |  |
| SCALE                                     | NONE  |       |  |
| DO NOT SCALE PRINT                        |       |       |  |
| UNLESS OTHERWISE SPECIFIED TOLERANCES ARE |       |       |  |
| ONE PLACE                                 | LOI   | ±.030 |  |
| TWO PLACES                                | LOOI  | ±.015 |  |
| THREE PLACES                              | LOOOI | ±.005 |  |
| ANGLES                                    |       | ± 2°  |  |
| WEIGHT                                    |       |       |  |

MASTER REDUCED  
 ANSI Y14.5M-1982 APPLIES

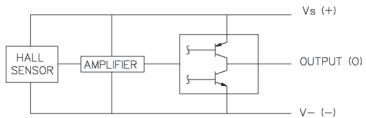
CHARACTERISTICS ARE AT  $V_s=5.00$  WITH 4.7K OUTPUT TO MINUS WITH  $T_A=-40^{\circ}\text{C}$  TO  $+125^{\circ}\text{C}$  UNLESS OTHERWISE SPECIFIED

SS496A1

SS496 SERIES CHART 1

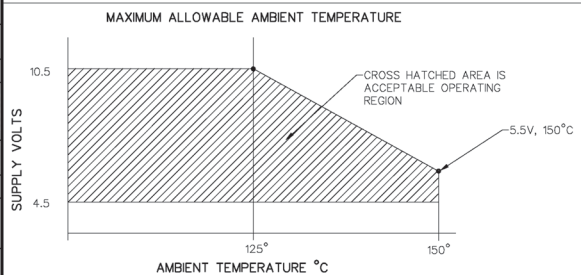
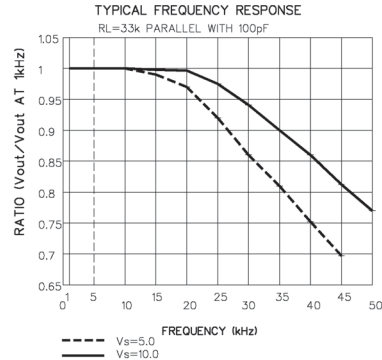
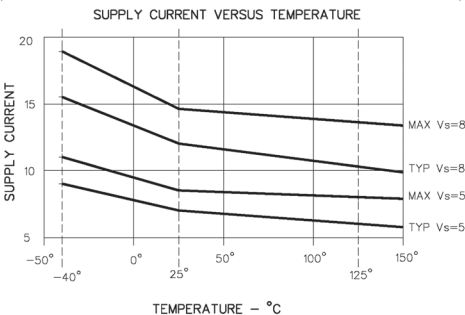
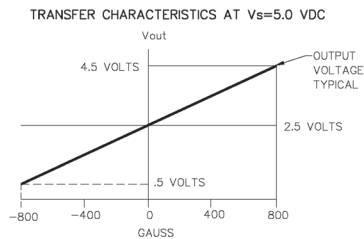
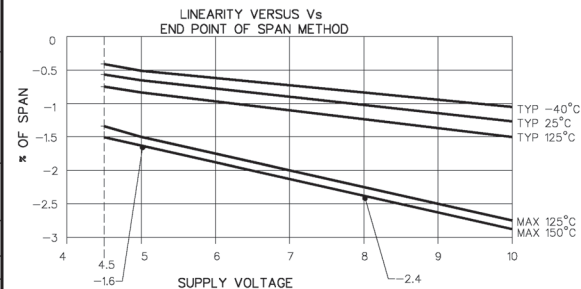
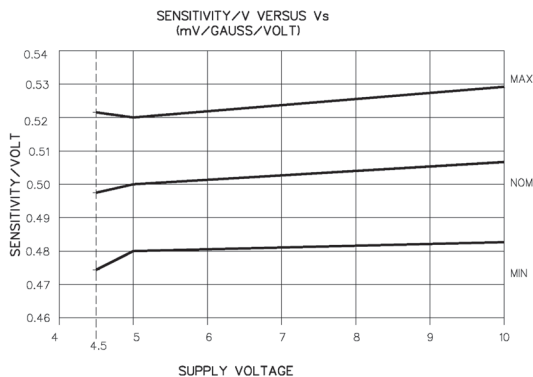
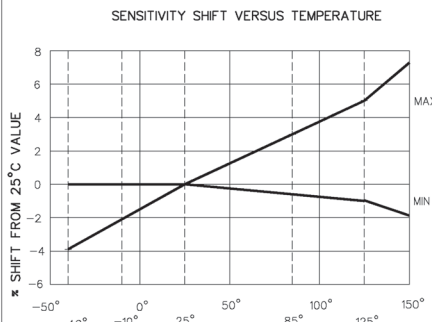
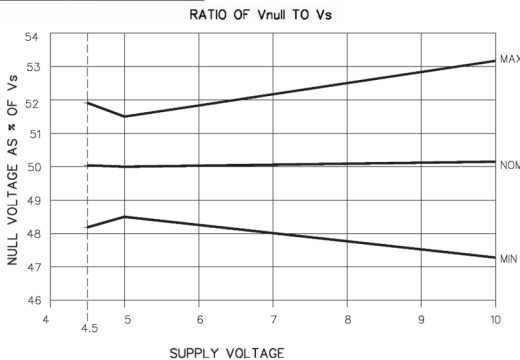
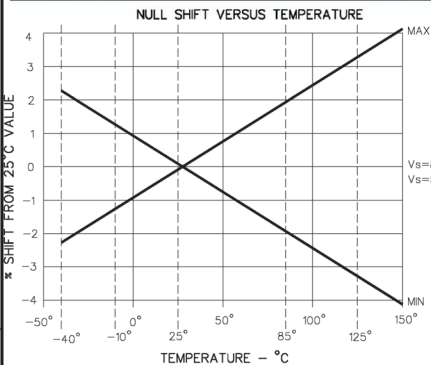
| PARAMETER                     | CONDITIONS                                                    | MIN        | TYP        | MAX   | UNITS     |
|-------------------------------|---------------------------------------------------------------|------------|------------|-------|-----------|
| SENSITIVITY                   | $T_A = 25^{\circ}\text{C}$                                    | 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 $125^{\circ}\text{C}$    | -.032      |            | +.032 | % / °C    |
| Vnull DRIFT                   | $B = 0, T_A = +125^{\circ}\text{C}$ TO $+150^{\circ}\text{C}$ | -.064      |            | +.064 | % / °C    |
| SENSITIVITY DRIFT             | $T_A = +25^{\circ}\text{C}$ TO $+125^{\circ}\text{C}$         | -.01       |            | +.05  | % / °C    |
| SENSITIVITY DRIFT             | $T_A = -40^{\circ}\text{C}$ TO $+25^{\circ}\text{C}$          | 0          |            | +.06  | % / °C    |
| SENSITIVITY DRIFT             | $T_A = +125^{\circ}\text{C}$ TO $+150^{\circ}\text{C}$        | -.04       |            | +.08  | % / °C    |
| LINEARITY                     | $B = -600$ 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  | °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    |



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REV. 4/78, CODE 91009

MICRO SWITCH

MASTER REDUCED  
ANSI Y14.5M-1982 APPLIES

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 (L)                             | ±.030 |
| TWO PLACES (LO)                           | ±.015 |
| THREE PLACES (LOO)                        | ±.005 |
| ANGLES                                    | ±2°   |
| WEIGHT                                    |       |

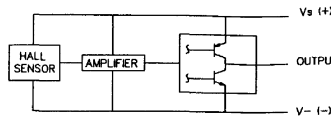
CHARACTERISTICS ARE AT  $V_s=5.00$  WITH 4.7K OUTPUT TO MINUS WITH  $T_A=-40^{\circ}\text{C}$  TO  $+125^{\circ}\text{C}$  UNLESS OTHERWISE SPECIFIED

SS496B

SS496 SERIES CHART 1

| PARAMETER                     | CONDITIONS                                                   | MIN        | TYP        | MAX   | UNITS     |
|-------------------------------|--------------------------------------------------------------|------------|------------|-------|-----------|
| SENSITIVITY                   | $T_A = 25^{\circ}\text{C}$                                   | 2.300      | 2.500      | 2.700 | mV/GAUSS  |
| NULL                          | $T_A = 25^{\circ}\text{C}$                                   | 2.350      | 2.50       | 2.650 | 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                   | $B = 0, T_A = 25^{\circ}\text{C TO } 125^{\circ}\text{C}$    | -0.64      |            | +0.64 | % / °C    |
| Vnull DRIFT                   | $B = 0, T_A = +125^{\circ}\text{C TO } +150^{\circ}\text{C}$ | -0.64      |            | +0.64 | % / °C    |
| SENSITIVITY DRIFT             | $T_A = +25^{\circ}\text{C TO } +150^{\circ}\text{C}$         | -0.02      |            | +0.08 | % / °C    |
| SENSITIVITY DRIFT             | $T_A = -40^{\circ}\text{C TO } +25^{\circ}\text{C}$          | -0.02      |            | +0.08 | % / °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  | °C        |

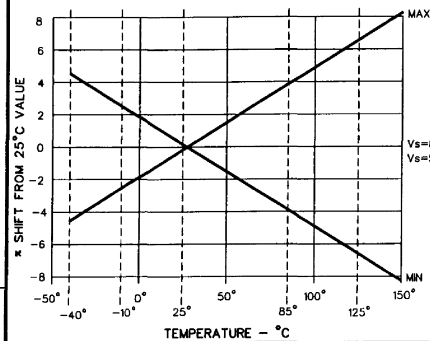
BLOCK DIAGRAM CURRENT SINKING OR SOURCING OUTPUT



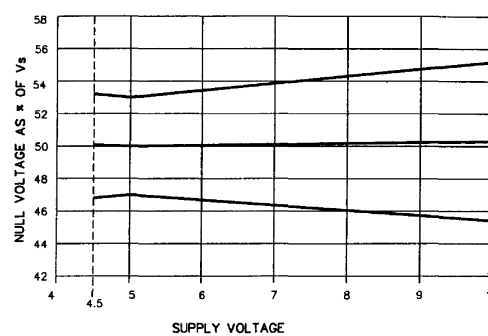
ABSOLUTE MAXIMUM CHARACTERISTICS

| 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    |

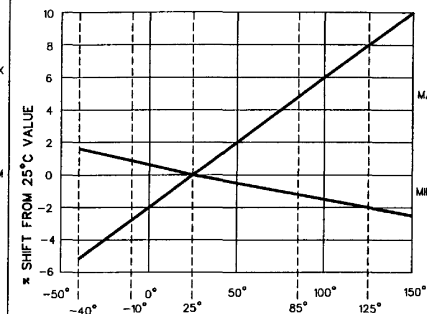
NULL SHIFT VERSUS TEMPERATURE



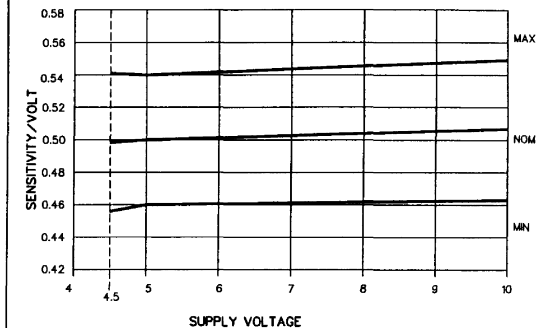
RATIO OF  $V_{null}$  TO  $V_s$



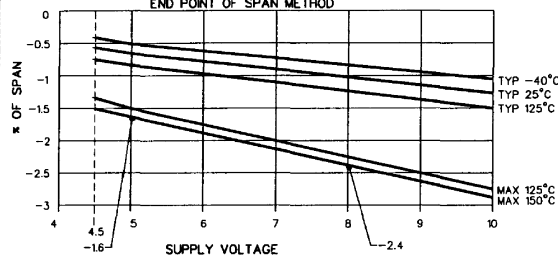
SENSITIVITY SHIFT VERSUS TEMPERATURE



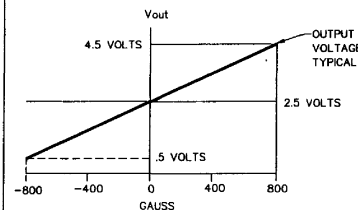
SENSITIVITY/V VERSUS  $V_s$   
(mV/GAUSS/VOLT)



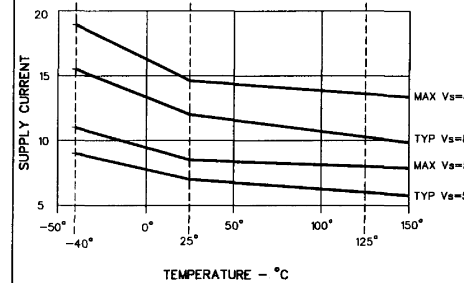
LINEARITY VERSUS  $V_s$   
END POINT OF SPAN METHOD



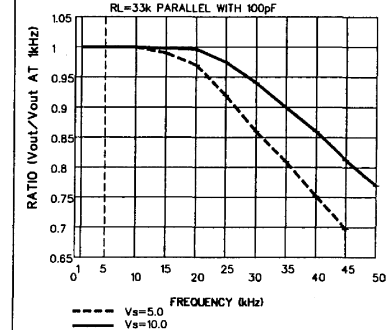
TRANSFER CHARACTERISTICS AT  $V_s=5.0$  VDC



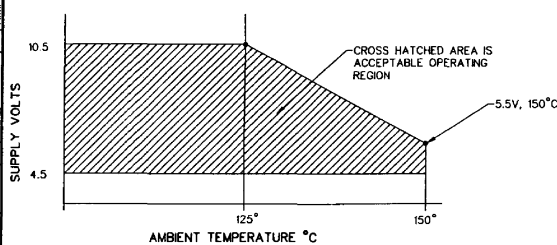
SUPPLY CURRENT VERSUS TEMPERATURE



TYPICAL FREQUENCY RESPONSE



MAXIMUM ALLOWABLE AMBIENT TEMPERATURE



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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°          |
| HEIGHT                                    |              |

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

Наши преимущества:

- Поставка оригинальных импортных электронных компонентов напрямую с производств Америки, Европы и Азии, а так же с крупнейших складов мира;
- Широкая линейка поставок активных и пассивных импортных электронных компонентов (более 30 млн. наименований);
- Поставка сложных, дефицитных, либо снятых с производства позиций;
- Оперативные сроки поставки под заказ (от 5 рабочих дней);
- Экспресс доставка в любую точку России;
- Помощь Конструкторского Отдела и консультации квалифицированных инженеров;
- Техническая поддержка проекта, помощь в подборе аналогов, поставка прототипов;
- Поставка электронных компонентов под контролем ВП;
- Система менеджмента качества сертифицирована по Международному стандарту ISO 9001;
- При необходимости вся продукция военного и аэрокосмического назначения проходит испытания и сертификацию в лаборатории (по согласованию с заказчиком);
- Поставка специализированных компонентов военного и аэрокосмического уровня качества (Xilinx, Altera, Analog Devices, Intersil, Interpoint, Microsemi, Actel, Aeroflex, Peregrine, VPT, Syfer, Eurofarad, Texas Instruments, MS Kennedy, Miteq, Cobham, E2V, MA-COM, Hittite, Mini-Circuits, General Dynamics и др.);

Компания «Океан Электроники» является официальным дистрибьютором и эксклюзивным представителем в России одного из крупнейших производителей разъемов военного и аэрокосмического назначения «JONHON», а так же официальным дистрибьютором и эксклюзивным представителем в России производителя высокотехнологичных и надежных решений для передачи СВЧ сигналов «FORSTAR».



## JONHON

«JONHON» (основан в 1970 г.)

Разъемы специального, военного и аэрокосмического назначения:

(Применяются в военной, авиационной, аэрокосмической, морской, железнодорожной, горно- и нефтедобывающей отраслях промышленности)

«FORSTAR» (основан в 1998 г.)

ВЧ соединители, коаксиальные кабели,  
кабельные сборки и микроволновые компоненты:

(Применяются в телекоммуникациях гражданского и специального назначения, в средствах связи, РЛС, а так же военной, авиационной и аэрокосмической отраслях промышленности).



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