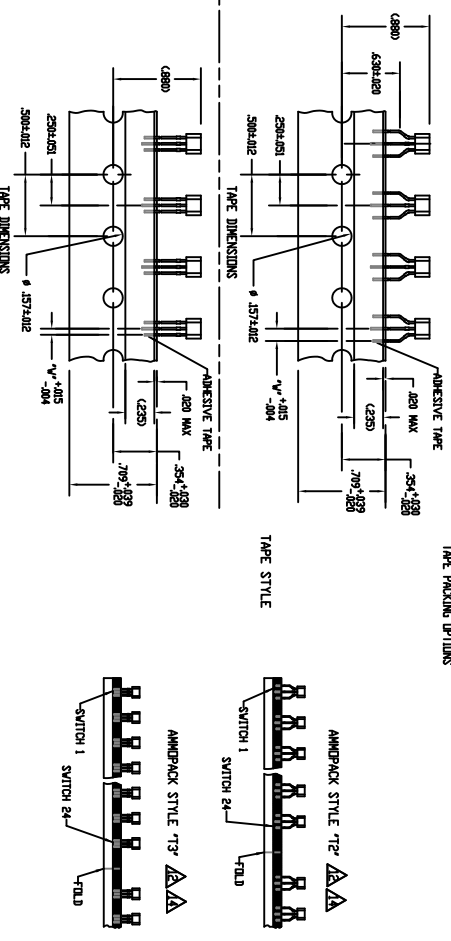
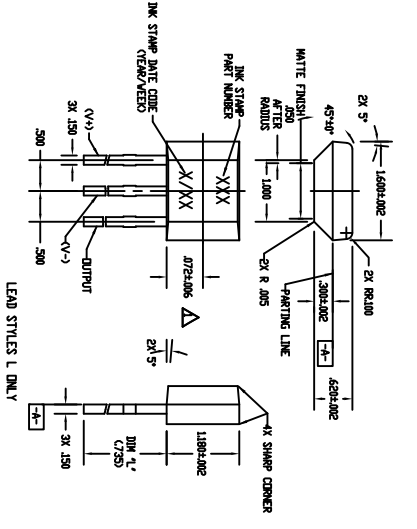
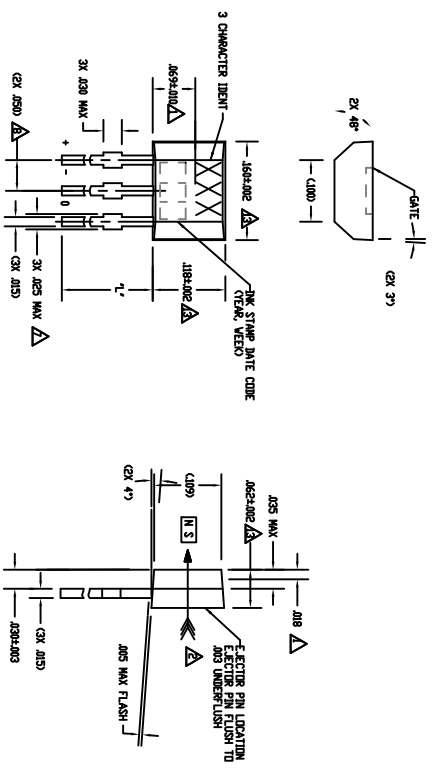


TAPE PACKING OPTIONS



- NOTES
- △ CENTERLINE OF HALL CELL
 - △ 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)
 - △ THE DEVICE CANNOT BE DAMAGED BY MAGNETIC OVEREXPOSURE
 - △ DAMAGE TO THE RADIOMETRIC SUPPORTED DURING ANY FEMPIRING/SHEERING OPERATION TO LEAD MUST BE LIMITED TO A MAXIMUM OF 2% OF THE DEVICE LENGTH
 - △ LEAD STRAIGHTNESS GUIDELINES ARE AS FOLLOWS:
 - 5 - PCB WAVE SOLDERING GUIDELINES ARE AS FOLLOWS:
 - 6 - BURR ARE ALLOWED ONLY IF FULL LENGTH OF LEADS WILL PASS THROUGH #023 HOLE.
 - △ LEAD REFERENCE DIMENSIONS DO NOT INCLUDE SOLDER THICKNESS
 - △ DIMENSION REFERS TO THE LOCATION OF LEAD CENTERLINES AS NOT BE AVAILABLE
 - △ ASSURE THAT THE LEADS ARE NOT STRESSED WITHIN THE PLASTIC
 - △ 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
 - △ LEAD STRAIGHTNESS MAY BE DETERMINED ON SOME PARTS BY BULK PACKAGING. USE A PLAIN PACKAGING OPTION
 - △ AMMPACK STYLE 'T2' & 'T3' 24 SWITCHES BETWEEN FIELDS, SKIP 1 SPACE AT FIELD. MAY BE REFERRED TO AS "FAN FLD"
 - △ AMMPACK STYLE 'T2' & 'T3' 24 SWITCHES BETWEEN FIELDS, SKIP 1 SPACE AT FIELD. MAY BE REFERRED TO AS "FAN FLD"
 - △ TAPE AND AMMPACK PER EIA-468

CATALOG LISTING	TAPE STYLE	DIM	DIM	COMMENTS
SS49E	NONE	.590	.050	BULK - 1000/BAG
SS49E-T2	T2	.590	.100	5000/BOX
SS49E-T3	T3	.590	.050	5000/BOX
SS49E-L	NONE	.735	.050	BULK - 1000/BAG
SS49E-F	NONE	.390	.100	BULK - 1000/BAG



THIS DRAWING CONFORMS TO THE REQUIREMENTS OF THE INTERNATIONAL STANDARD FOR COMMERCIAL DRAWINGS, IS0 10118-1, WHICH IS A DERIVATIVE OF THE INTERNATIONAL STANDARD, ISO 7243, 1982. APPLIES

ISO SENSITIVITY CLASS 3

INDUSTRIAL DESIGN

LINEAR HALL EFFECT SENSOR

SS49E SERIES CHART 1

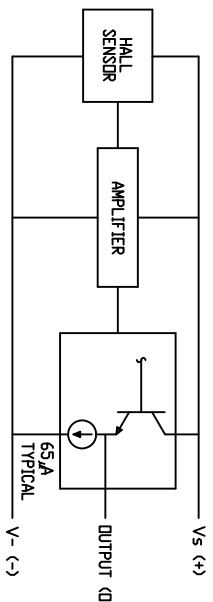
THIRD ANGLE PROJECTION

SCALE	1:1
UNLESS OTHERWISE SPECIFIED	
LINE PLACE	600 4400
TEXT PLACE	600 4400
ANGLE	1000 4400
UNLESS OTHERWISE SPECIFIED	
LINE PLACE	600 4400
TEXT PLACE	600 4400
ANGLE	1000 4400

CHARACTERISTICS ARE AT $V_s=5.00$ WITH 10K OUTPUT TO MINUS WITH $T_A=-40^\circ\text{C}$ TO $+85^\circ\text{C}$ UNLESS OTHERWISE SPECIFIED

PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
SENSITIVITY	$T_A = 25^\circ\text{C}$	1.0	1.4	1.75	mV/GAUSS
NULL	$T_A = 25^\circ\text{C}$	2.25	2.50	2.75	VOLTS
SUPPLY CURRENT	$V_s > 3.0$	1	1.5	10	mA
OUTPUT CURRENT SOURCE					mA
RESPONSE TIME			3		s
OUTPUT VOLTAGE SWING					VOLTS
FROM $V_{DDM} + V_{DDM}$	-B APPLIED	1.05	.95		
	+B APPLIED	$V_s - 1.05$	$V_s - .95$		
B LIMITS FOR LINEAR OPERATION	-B MAX	-6.50	-10.00		GAUSS
	+B MAX	+6.50	+10.00		GAUSS
VNULL DRIFT	$B = 0, T_A = -40^\circ\text{C}$ TO $+85^\circ\text{C}$	-1.0		+1.0	% / °C
SENSITIVITY DRIFT	$T_A = +25^\circ\text{C}$ TO $+125^\circ\text{C}$	-0.1		+0.5	% / °C
SENSITIVITY DRIFT	$T_A = -40^\circ\text{C}$ TO $+25^\circ\text{C}$	0		+0.6	% / °C
SENSITIVITY DRIFT	$T_A = +125^\circ\text{C}$ TO $+150^\circ\text{C}$	-0.4		+0.8	% / °C
LINEARITY	$B = -6.50$ TO $+6.50$	-7		+7	% OF SPAN
SUPPLY VOLTAGE	-40°C TO $+100^\circ\text{C}$	2.7	5.0	6.5	VOLTS
OPERATING TEMP		-40		+100	°C

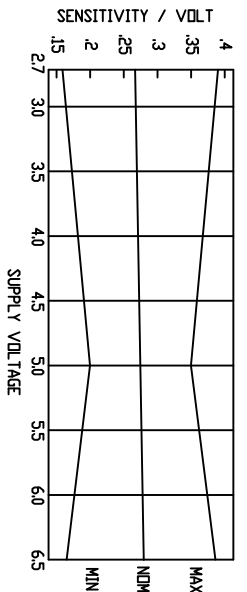
BLOCK DIAGRAM CURRENT SOURCING OUTPUT



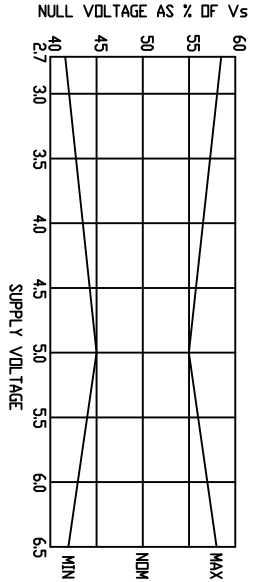
ABSOLUTE MAXIMUM CHARACTERISTICS

CHARACTERISTIC	SYMBOL	TEST CONDITION	MIN	MAX	UNITS
SUPPLY VOLTAGE	V_s		-0.5	8	V
OUTPUT VOLTAGE	V_{out}		-0.5	8	V
OUTPUT CURRENT	I_{out}	SOURCE	0	10	mA
TEMPERATURE	T_A	OPERATING	-40	100	°C
	T_S	STORAGE ($V_s=0$)	-55	165	°C

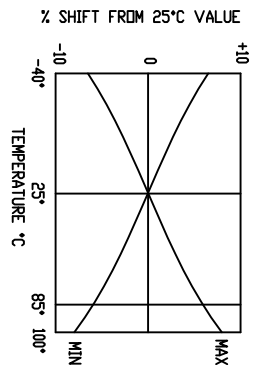
SENSITIVITY/V VERSUS V_s
(mV/Gauss/Volt)



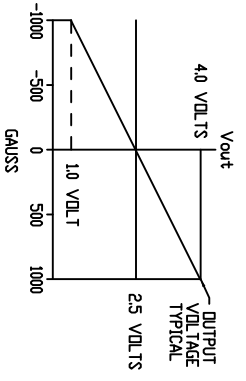
RATIO OF V_{null} TO V_s



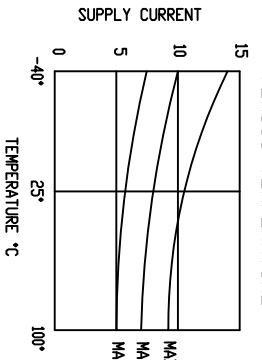
NULL SHIFT VERSUS TEMPERATURE



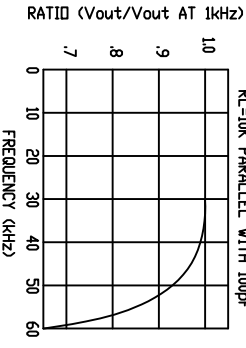
TRANSFER CHARACTERISTICS
AT $V_s=5.0$ VDC



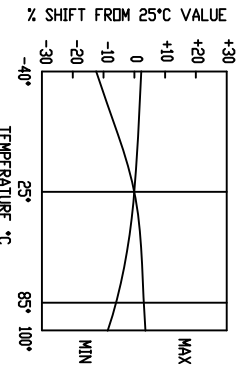
SUPPLY CURRENT
VERSUS TEMPERATURE



TYPICAL FREQUENCY RESPONSE
 $R_L=10K$ PARALLEL WITH $100\mu F$



SENSITIVITY
SHIFT VERSUS TEMPERATURE



THIS DRAWING CONFORMS TO THE STANDARDS OF THE NATIONAL BUREAU OF STANDARDS (NBS) AND THE INTERNATIONAL ORGANIZATION OF STANDARDIZATION (ISO).
UNLESS OTHERWISE SPECIFIED, DIMENSIONS ARE IN MILLIMETERS (IN PARENTHESES).
TOLERANCES: FRACTIONS DECIMALS ANGLES
NONE DIMENSIONS SPECIFIED
HOLE: .015 (0.0005)
TWO PLACE: .020 (.0008)
THREE PLACE: .000 (.00004)
ANGLES: .1°