

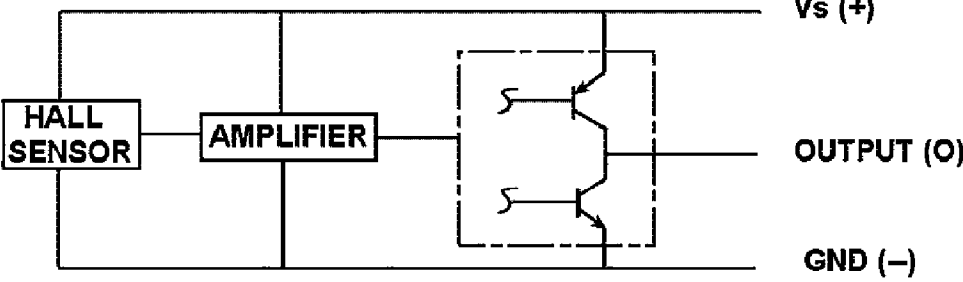
SS491 SERIES CHART 1

Honeywell				
D	TITLE MINIATURE RATIOMETRIC LINEAR HALL EFFECT SENSOR			
	SIZE C	TYPE I	DRAWING NAME SS491 SERIES CHART 1	REV A
	SCALE	NTS		SHEET 1 OF 2

CHARACTERISTICS ARE AT $V_s = 10.0$ Vdc WITH 4.7K OUTPUT TO MINUS AND
 $T_A = -40^{\circ}\text{C}$ TO $+85^{\circ}\text{C}$ UNLESS OTHERWISE SPECIFIED

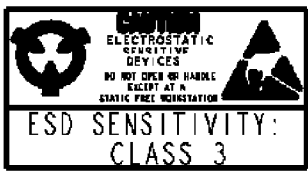
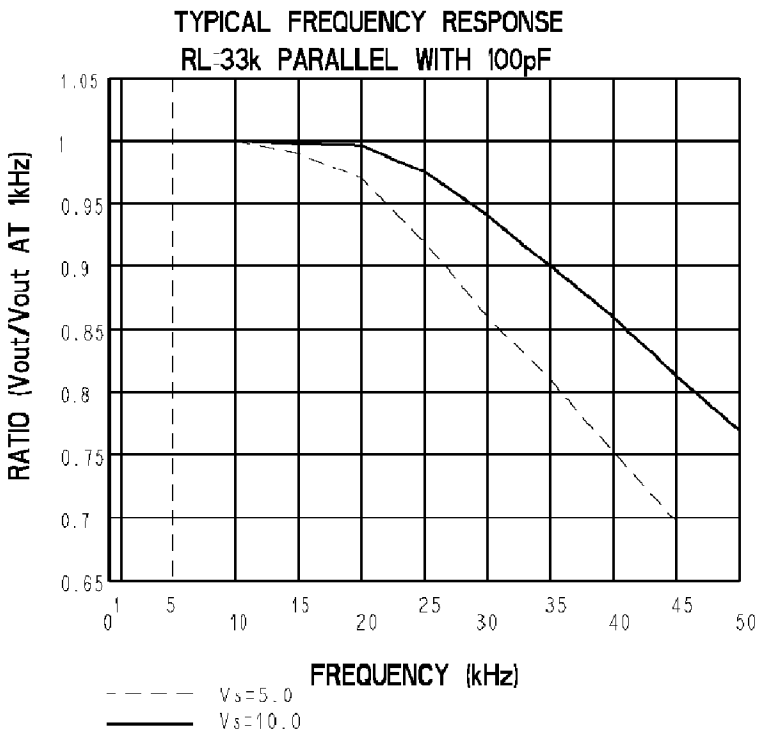
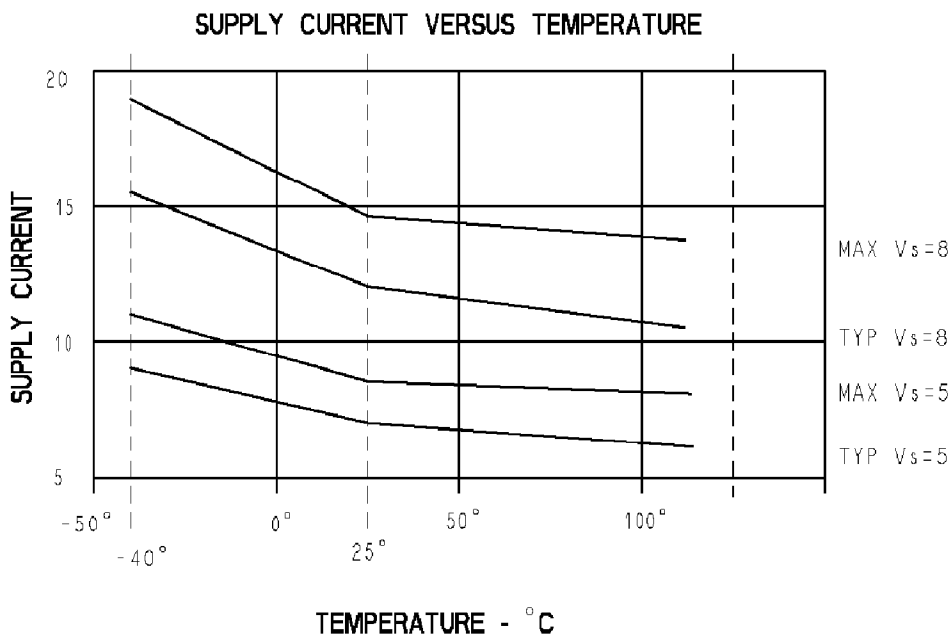
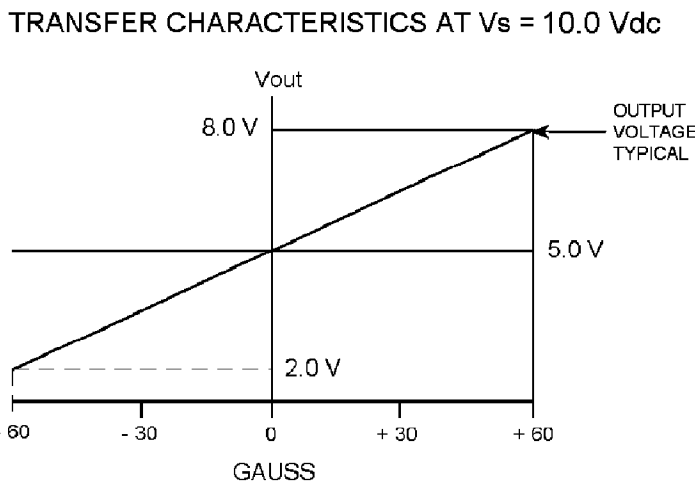
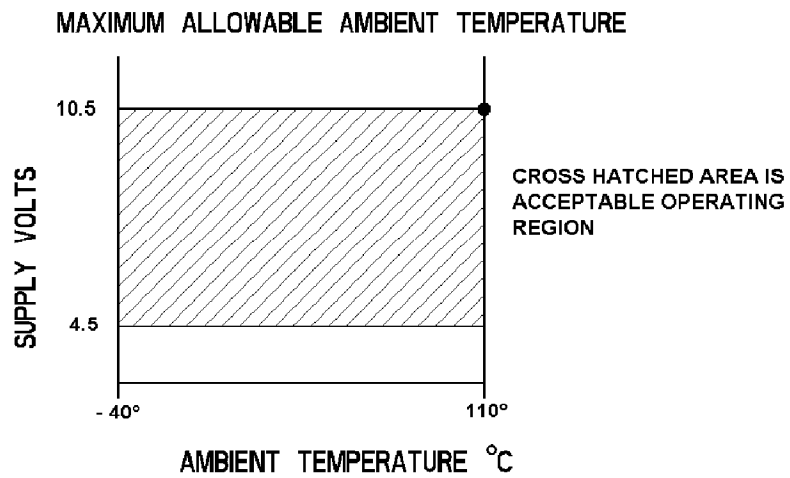
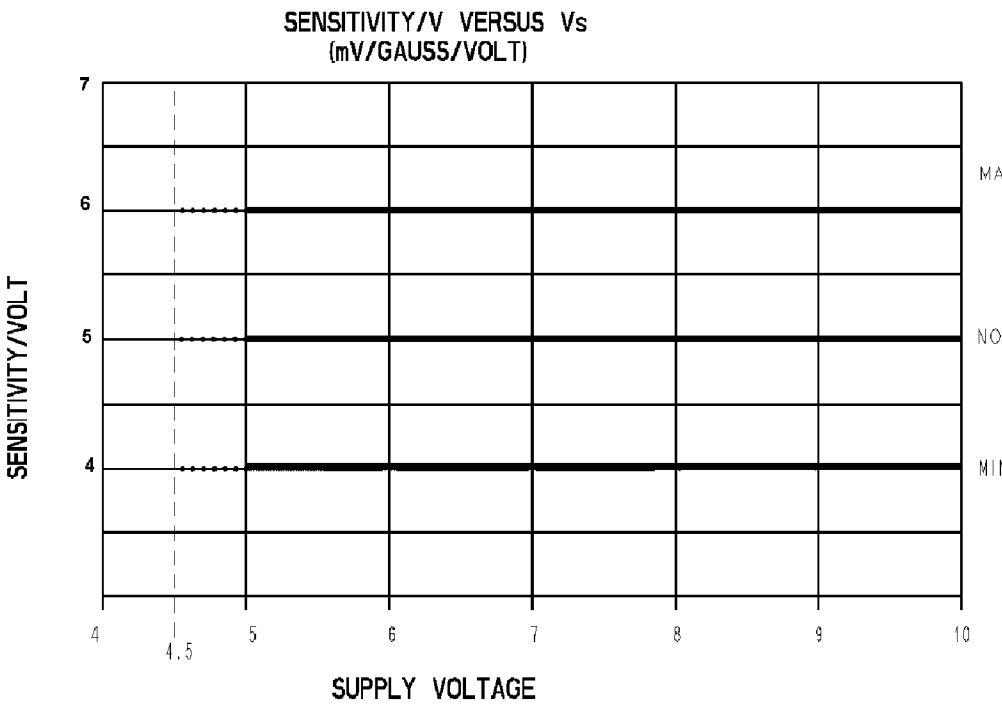
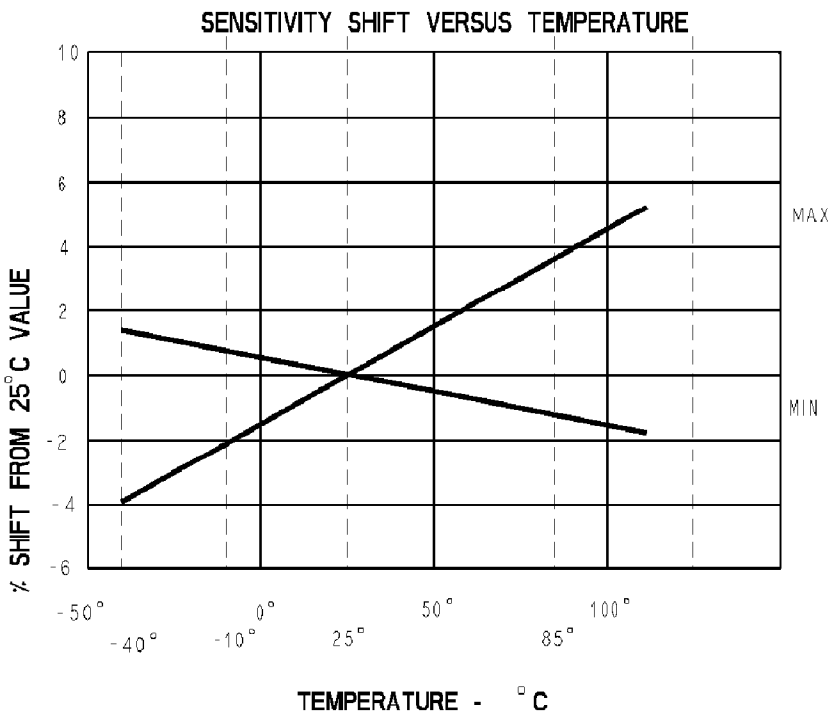
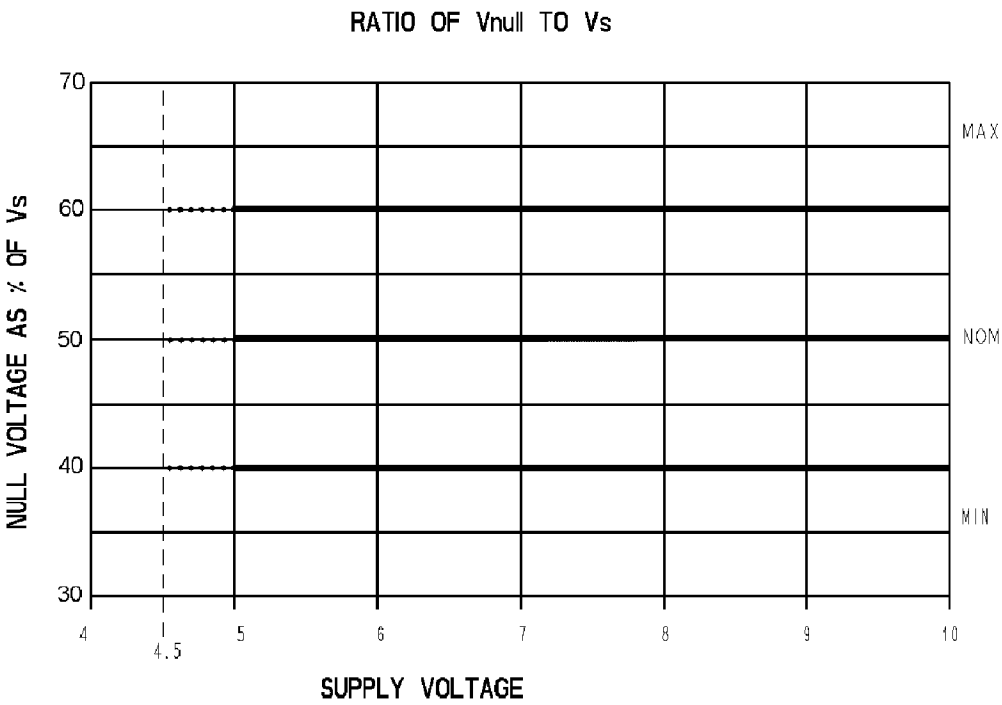
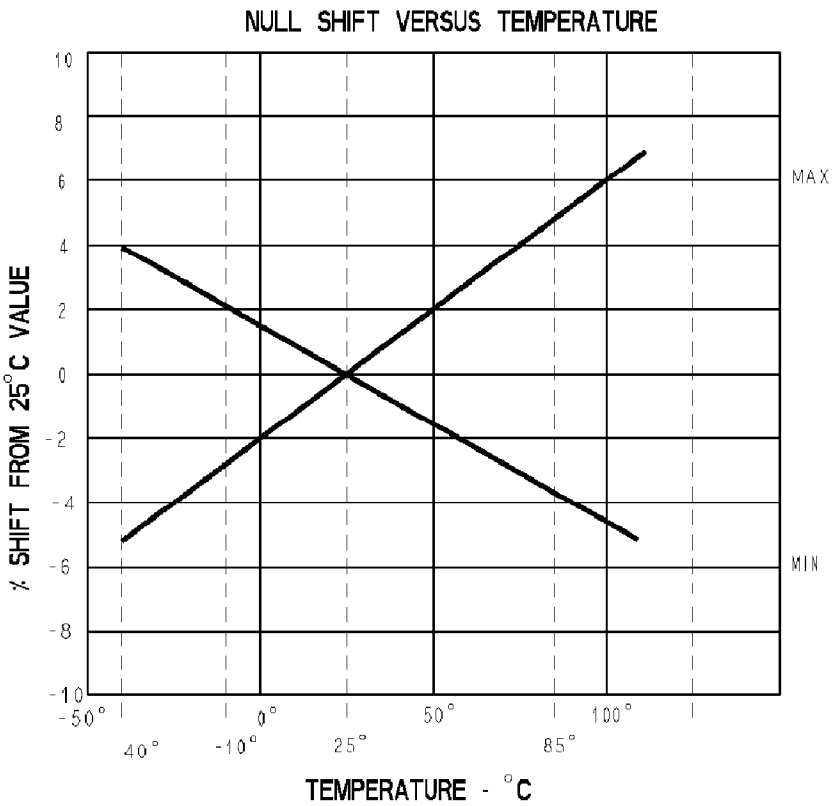
PARAMETER	CONDITIONS	MIN	TYP	MAX	UNITS
SENSITIVITY	$T_A = +25^{\circ}\text{C}$	40	50	60	mV/GAUSS
NULL	$T_A = +25^{\circ}\text{C}$	4	5	6	VOLTS
SUPPLY CURRENT			18	30	mA
OUTPUT CURRENT	SOURCE	$V_s > 4.5$	1	1.5	mA
	SINK	$V_s > 4.5$	.6	1.5	mA
	SINK	$V_s > 5.0$	1	1.5	mA
RESPONSE TIME			3		μs
OUTPUT VOLTAGE	VOM -	- B APPLIED	.4	.2	VOLTS
	VOM +	+ B APPLIED	$V_s - .4$	$V_s - .2$	VOLTS
B LIMITS FOR LINEAR OPERATION	- B MAX	- 50	- 60		GAUSS
	+ B MAX	+ 50	+ 60		GAUSS
Vnull DRIFT	$B = 0, T_A = -40^{\circ}\text{C}$ TO $+85^{\circ}\text{C}$	-.06		+.08	% / $^{\circ}\text{C}$
SENSITIVITY DRIFT	$T_A = -40^{\circ}\text{C}$ TO $+85^{\circ}\text{C}$	-.02		+.06	% / $^{\circ}\text{C}$
LINEARITY	$B = -60$ to $+60$	0	- 1.0	- 1.5	% OF SPAN
SUPPLY VOLTAGE	$T_A = -40^{\circ}\text{C}$ TO $+85^{\circ}\text{C}$	4.5	10.0	10.5	VOLTS
OPERATING TEMP		- 40		+ 85	$^{\circ}\text{C}$

BLOCK DIAGRAM CURRENT SINKING OR SOURCING OUTPUT



ABSOLUTE MAXIMUM CHARACTERISITICS 

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	-40	110	$^{\circ}\text{C}$
	T_s	STORAGE ($V_{cc}=0$)	-55	165	$^{\circ}\text{C}$



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SIZE	DWG TYPE	DRAWING NAME	REV
C	I	SS491 SERIES CHART 1	A
SCALE	NTS	SHEET	2 OF 2