

Types OHN3019U, OHS3019U

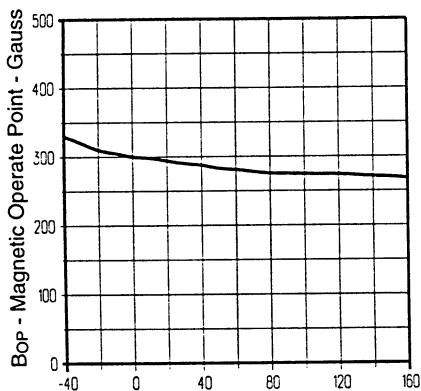
Electrical Characteristics ($V_{CC} = 4.5 \text{ V to } 24 \text{ VDC}$, $T_A = 25^\circ \text{ C}$ unless otherwise noted)

SYMBOL	PARAMETER	MIN	TYP	MAX	UNITS	TEST CONDITIONS
B _{OP}	Magnetic Operate Point ⁽²⁾		300	500	Gauss	
B _{RP}	Magnetic Release Point	125	235		Gauss	
B _H	Magnetic Hysteresis	50	65		Gauss	
I _{CC}	Supply Current		4	7	mA	$V_{CC} = 24 \text{ V}$, Output Off
V _{OL}	Output Saturation Voltage		100	400	mV	$V_{CC} = 4.5 \text{ V}$, $I_{OL} = 20 \text{ mA}$, $B \geq 500 \text{ Gauss}$
I _{OH}	Output Leakage Current		0.1	10.0	μA	$V_{CC} = 24 \text{ V}$, $V_{OUT} = 24 \text{ V}$, $B \leq 100 \text{ Gauss}$
t _r	Output Rise Time		0.21	1.00	μs	$R_L = 820 \Omega$, $C_L = 20 \text{ pF}$
t _f	Output Fall Time		0.25	1.00	μs	

(2) South pole facing symbolized surface.

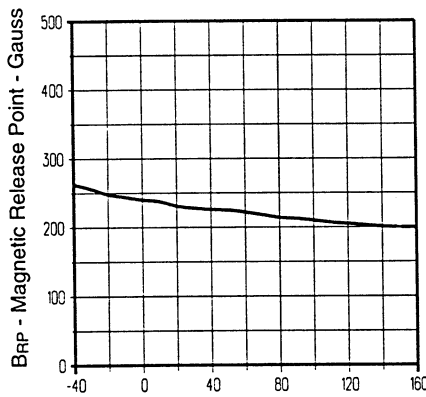
Typical Performance Curves

Magnetic Operate Point vs Ambient Temperature



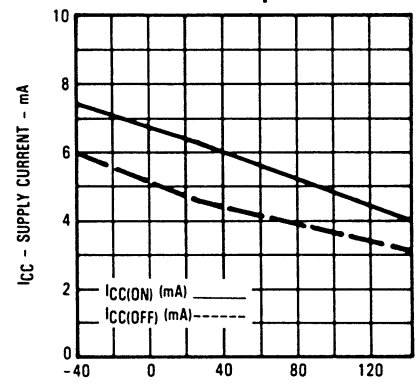
TA - Ambient Temperature - °C

Magnetic Release Point vs Ambient Temperature



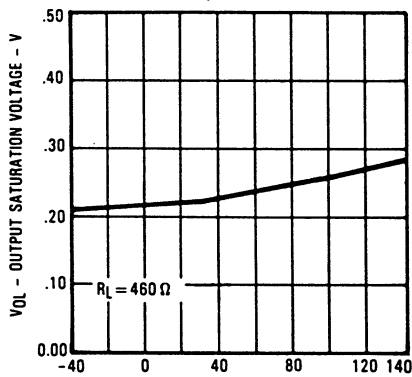
TA - Ambient Temperature - °C

Supply Current vs Ambient Temperature



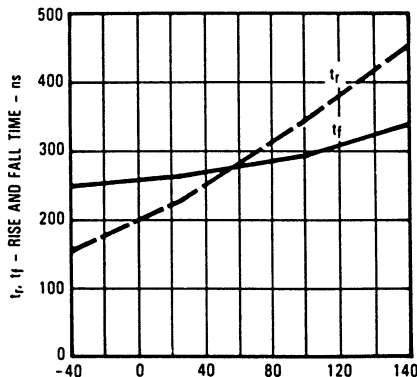
TA - AMBIENT TEMPERATURE - °C

Output Saturation Voltage vs Ambient Temperature



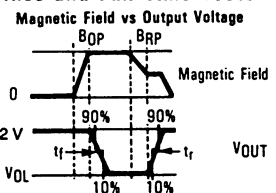
TA - AMBIENT TEMPERATURE - °C

Rise and Fall Time vs Ambient Temperature

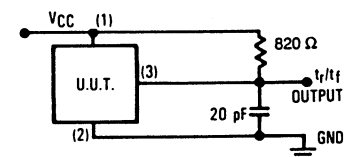


TA - AMBIENT TEMPERATURE - °C

Rise and Fall Time Tests



Rise and Fall Time Test Circuit



HALL EFFECT SENSORS