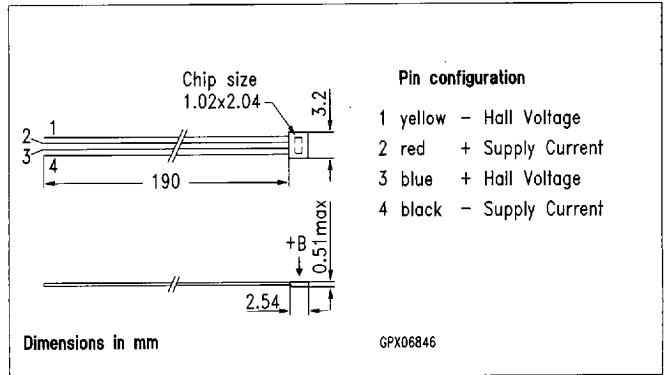


Features

- High sensitivity
- Low TC of sensitivity and internal resistance
- Very flat ceramic package with wire leads

Typical applications

- Proximity switches
- Brushless DC motor
- Ignition system
- Gaussmeters
- Electronic compass
- Current probes
- Magnetic card reader
- Power transducers
- Magnetic tape heads



Type	Ordering Code
FH 301-20	Q68000-A8764-F261

The FH 301-20 is a magnetic fieldprobe in InAs semiconductor-material with wire leads, which is mounted on a ceramic substrate. The chip size is $1.02 \times 2.04 \text{ mm}^2$.

Maximum ratings

Parameter	Symbol	Value	Unit
Operating temperature	T_A	$-55 \dots +100$	$^{\circ}\text{C}$
Storage temperature	T_{stg}	$-55 \dots +120$	$^{\circ}\text{C}$
Supply current	I_1	50	mA
Thermal conductivity soldered, in air	G_{thA}	1.25	mW/K
	G_{thC}	25	mW/K

Characteristics ($T_A = 25^{\circ}\text{C}$)

Nominal supply current	I_{1N}	25	mA
Open-circuit sensitivity	K_{B0}	> 4	V/AT
Open-circuit Hall voltage $I_1 = I_{1N}$, $B = 1 \text{ T}$	V_{20}	> 100	mV
Ohmic offset voltage $I_1 = I_{1N}$, $B = 0 \text{ T}$	V_{R0}	< 5	mV
Linearity of Hall voltage $I_1 = I_{1N}$, $B = 0 \dots 1 \text{ T}$, R_{LL}	F_L	typ. < 1	%
Input resistance $B = 0 \text{ T}$	R_{10}	$20 \dots 40$	Ω
Output resistance $B = 0 \text{ T}$	R_{20}	$40 \dots 120$	Ω
Temperature coefficient of the open-circuit Hall voltage $I_1 = I_{1N}$, $B = 0.1 \text{ T}$, $T = -20 \dots +80^{\circ}\text{C}$	TC_{V20}	< -0.1	%/K
Temperature coefficient of the internal resistance $B = 0 \text{ T}$, $T = -20 \dots +80^{\circ}\text{C}$	TC_R	< -0.1	%/K
Temperature coefficient of ohmic offset voltage $I_1 = I_{1N}$, $B = 0 \text{ T}$, $T = -20 \dots +80^{\circ}\text{C}$	TC_{V0}	< 10	$\mu\text{V/K}$