



Features

- Very high sensitivity
- Very low current requirement
- Low TC of sensitivity and internal resistance
- High input impedance

Typical applications

- Proximity switches
- Brushless DC motor
- Rotary speed sensors
- Watthour meter
- Multipliers
- Air gap measurement
- Magnetic card reader
- Permanent magnet measurement

Type	Ordering Code
GH 600	Q68000-A8763-F261

The Hall sensor GH 600 is a Gallium-Arsenide ion-implanted planar device. The system is encased in an epoxy surface mounted package and mounted on a flexible Kapton strip.

Maximum ratings

Parameter	Symbol	Value	Unit
Operating temperature	T_A	- 55...+ 125	°C
Storage temperature	T_{stg}	- 55...+ 150	°C
Supply current	I_1	10	mA
Thermal conductivity soldered, in air	G_{thA} G_{thC}	1.2	mW/K mW/K

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

Nominal supply current	I_{1N}	5	mA
Open-circuit sensitivity	K_{B0}	100...280	V/AT
Open-circuit Hall voltage $I_1 = I_{1N}$, $B = 0.1\text{ T}$	V_{20}	50...140	mV
Ohmic offset voltage $I_1 = I_{1N}$, $B = 0\text{ T}$	V_{R0}	< ± 17	mV
Linearity of Hall voltage			
Input resistance $B = 0\text{ T}$	R_{10}	450...900	W
Output resistance $B = 0\text{ T}$	R_{20}	580...1700	W
Temperature coefficient of the open-circuit Hall voltage $I_{1N} = 1\text{ mA}$, $B = 0.5\text{ T}$, $T = -10...+80\text{ °C}$	TC_{V20}	< - 0.07	%/K
Temperature coefficient of the internal resistance $I_{1N} = 1\text{ mA}$, $T = -10...+80\text{ °C}$	T_{CR}	typ. 0.15	%/K
Temperature coefficient of ohmic offset voltage $I_{1N} = 1\text{ mA}$, $B = 0\text{ T}$, $T = -10...+80\text{ °C}$	T_{CV0}	typ ± 0.6	μV/K