

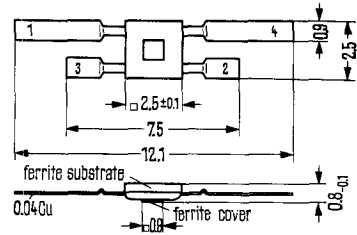
Ferrite Hall signal probe

The Hall generator SBV 566 is especially suitable as contactless signal emission device as well as position indicator of magnets. At constant control current, the Hall voltage is proportional to the flux through the ferrite cover up to $2 \cdot 10^{-7}$ Wb (corresponds to a induction of 0.25 Tesla).

The temperature dependence can be compensated by connecting a resistor of $0.5 R_{10}$ parallel to the control current path of the Hall generator and by supplying this arrangement with a current being three times the nominal control current.

Type	Order number
SBV 566	Q.64099-V566

Hall voltage leads: 3.4 (or 1.2).
Control current leads: 1.2 (or 3.4).



Weight approx. 0.2 g Dimensions in mm

Maximum ratings

Maximum permissible control current in static air
Thermal resistance between semiconductor layer and bed
Storage temperature
Working temperature

	SBV 566	
I_{1M}	75	mA
R_{th}	approx. 250	K/W
T_s	-50 to +100	°C
T	-20 to +65	°C

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

Rated value of control current for operation in air
Open-circuit Hall voltage at I_{1n} and a probe flux of $2 \cdot 10^{-7}$ Wb
Control-side internal resistance ($B=0$)
Hall-side internal resistance ($B=0$)
Resistive zero component
Hall remanence voltage at I_{1n} after a probe flux of $2 \cdot 10^{-7}$ Wb
Mean temperature coefficient of V_{20} between 0 and 50°C
Mean temperature coefficient of R_{10} and R_{20} between 0 and 50°C
Insulation resistance between semiconductor system and ferrite parts

I_{1n}	35	mA
V_{20}	≥ 400	mV
R_{10}	approx. 30	Ω
R_{20}	approx. 30	Ω
R_0	≤ 1.0	V/A
V_{20Rem}	approx. 1.5 of V_{20}	%
β	approx. -1.5	%/°C
α	approx. -2	%/°C
R_{1s}	> 1	k Ω