

R-Shield

Rectangular Shape Ni-Fe Soft Ferromagnetic Shield



Description

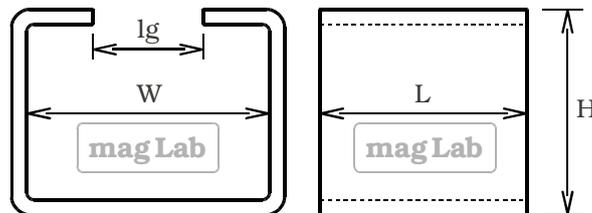
The R-Shield is a soft ferromagnetic shield featuring superior material characteristics such as high linearity and very low hysteresis.

The shield is designed for planar current sensing in combination with a magnetic field sensor, i.e., Hall sensor, AMR sensor and a busbar conductor. The R-Shield protects the sensor from parasitic magnetic fields caused by nearby conductors or other magnetic field sources while at the same time it enhances sensitivity and signal-to-offset ratio of the sensor.

Magnetic Characteristics

Parameter	Typical Value	Unit
Relative Permeability	100'000	a.u.
Initial Relative Permeability	7000	a.u.
Saturation Flux Density	1	T
Hysteresis	2.8	A/m
Curie Temperature	450	degC

Geometry



Material Specification	R-Shield-W-L-H-[T]	-[Ni] ⁻¹ (%)
Standard thickness: 0.8mm / 48% Ni	T=0.8	Ni=48
Other thickness options 0.35/0.5/1/1.2 mm (on request)	T=...	Ni=...

Order Codes: R-Shield – Width – Length – Height – GapLength – Thickness (– Ni)

R-Shield (order code example)	-[W]-	-[L]-	-[H]-	-[lg]-	-[T]
R-Shield-14-12-12-5-0.8 (standard)	W=14	L=12	H=12	lg=5	T=0.8

(all dimensions: mm)

1 Standard version contains 48% Ni; others on request