

NIPPON GOKIN DPS

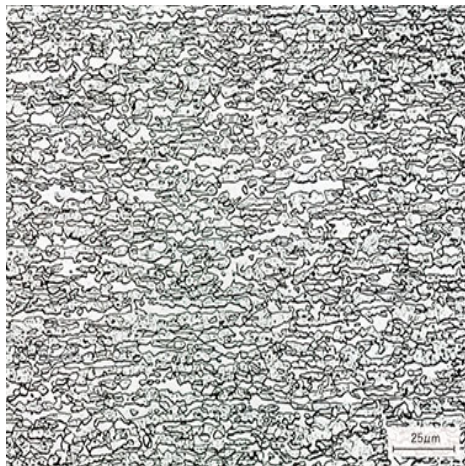
Dual Phase Steel for FPCB Assembly – SUS431



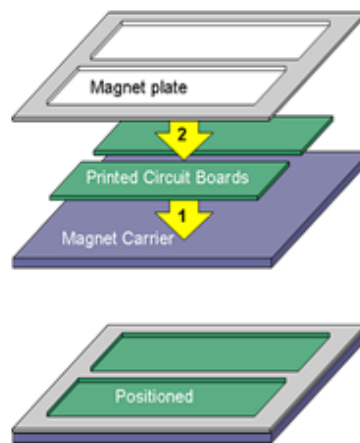
DATASHEET

Chemical Composition

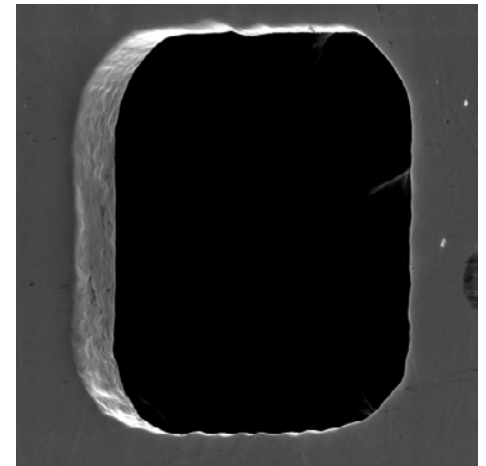
SUS431 % Mass	Carbon (C)	Silicon (Si)	Manganese (Mn)	Phosphorus (P)	Sulfur (S)	Chromium (Cr)	Nickel (Ni)	Iron (Fe)
Min	-	-	-	-	-	16.00	1.00	Bal
Max	0.08	-	-	-	-	18.00	3.00	



2-5µm molecular grain size



Magnet Carrier for FPCB Assembly



Very sharp laser cutting definition

Mechanical Properties

Hardness (HV)	Yield Strength (MPa)	Tensile Strength (MPa)	Elongation (%)	Thermal Conductivity (W/m.°C 100°C)	Available Thickness (mm)	Available Sizes (mm)
370 ~ 400	750 ~ 1200	1050 ~ 1300	9.7	19.9	0.040 ~ 2.500 Tolerance ±5%	Width: 600 ±1 Length: Any ±1

Product Brief

Nippon Gokin's DPS employs a different manufacturing technique. Rather than increasing strength by cold rolling, such as austenitic stainless steel, DPS is a product with increased strength by heat treatment (multi-phase process) to adjust the chemical composition. The metal alloy is formed by a fine mixed structure of hard martensite phase and soft ferrite phase, making it slightly magnetic. Therefore, the tensile strength properties of this multi-phase process offers a very economical material.