



Customized Precision Metal Stamping for EMI RFI Protection in High-Frequency Electronic Devices with Custom PCB RF Shields

Our Product Introduction

Basic Information

- Place of Origin: China
- Brand Name: Xianheng
- Certification: ISO 9001:2015 SGS RoHS
- Model Number: RF-XG-36
- Minimum Order Quantity: 1 pcs
- Price: USD 0.01\$-0.5\$
- Packaging Details: Carton Wooden case
- Delivery Time: 5-8 days
- Payment Terms: T/T, Western Union, MoneyGram
- Supply Ability: 10000 SET per week

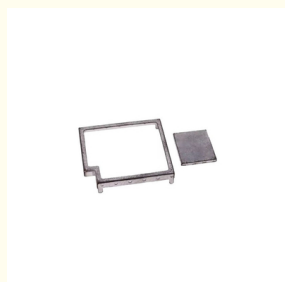


Product Specification

- Products: SMD EMI PCB RF Shield Cover, stamping Contacts, Metal Parts
- Process: Metal Sheets Fabrication, Welding Cutting Punching Stamping
- Application: SMD EMI PCB RF Shield Cover, Mobile PCB Cover
- Tolerance: +/-0.02mm
- Equipment: Precision Stamping Parts
- Material: Tin Plate Copper-Nickel-Zinc Alloy
- Function: Shielding Cover
- Used: PCB Board, mobile Phones Cover, Computers, GPS, Watches, Digital Products And Other Electronic Products, Prevent Electromagnetic Interference (EMI), On PCB Components And LCM Shield
- Surface Finishing: Normal, tin Plating, nickel Plating
- Package: Plastic Bag, Blister Box, Tap Reel Or As Your Required



More Images



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Product Description

What We Can Provide

Customized Precision Metal Stamping for EMI RFI Protection in High-Frequency Electronic Devices with Custom PCB RF Shields

Description Of Customized Precision Metal Stamping for EMI RFI Protection in High-Frequency Electronic Devices with Custom PCB RF Shields

In high-frequency electronic devices, electromagnetic interference (EMI) and radio-frequency interference (RFI) pose significant challenges, potentially causing signal degradation, data corruption, or system failure. To mitigate these risks, customized precision metal stamping combined with custom PCB RF shields has emerged as a critical solution. This approach involves designing and manufacturing bespoke metal components that seamlessly integrate with printed circuit boards (PCBs) to block or absorb unwanted electromagnetic radiation while ensuring optimal signal integrity.

Material Of Customized Precision Metal Stamping for EMI RFI Protection in High-Frequency Electronic Devices with Custom PCB RF Shields

Material and Testing Report		
Metal	Aluminum	Aluminum 2024 Aluminum 5052 Aluminum 6061-T6 Aluminum 6063 Aluminum 7075 Aluminum MIC 6
	Stainless steel	SUS303, SUS304, SS316, SS316L
		UNS S32304 UNS S32003 UNS S31803 UNS S32205
		UNS S32760 UNS S32750 UNS S32550 UNS S32707 UNS S33207
	Steel	12L14 4140 1018 1045 12L14 4130 4142 ,O1 tool steel, D2 tool steel,A36 1008 ,Alloy42
	Titanium	Grades 1-4 Grade 5 Grade 9
	Brass	260, C360, H59, H60, H62, H63, H65, H68, H70
	Copper	
	Phosphor bronze	
	Bronze	C932
	Carbon fiber	
	PTFE	Polytetrafluoroethylene (PTFE)
Plastic	Acetal	(Polyoxymethylene (POM)) [Delrin]
	PEEK	Polycarbonate
	Polystyrene	Polyether Ketone
	Nylon	
	ABS	
	PVC	
	Acrylic	
	G-10 Garolite	
	Fiberglass	

Finish Result	
As Machined	Sharp edge and burrs will be removed
Bead Blast	The part surface is left with a smooth, matte appearance
Anodized	Type II creates a corrosion-resistant finish. Parts can be anodized in different colors—clear, black, red, and gold are most common—and is usually associated with aluminum.
	Type III is thicker and creates a wear-resistant layer in addition to the corrosion resistance seen with Type II.
Powder Coat	This is a process where powdered paint is sprayed onto a part which is then baked in an oven. This creates a strong, wear- and corrosion-resistant layer that is more durable than standard painting methods. A wide variety of colors are available to create the desired aesthetic.
Customized	Contact us via email, skype, whatsapp. We will look into a finishing process for you.
Others	
Tolerance	+/-0.005mm
Lead Time	1-2 weeks for samples, 3-4 weeks for mass production
Drawing Accepted	Solid Works, Pro/Engineer, AutoCAD(DXF, DWG), PDF
Payment Terms	TT/Paypal/WestUnion

Industries Of Customized Precision Metal Stamping for EMI RFI Protection in High-Frequency Electronic Devices with Custom PCB RF Shields

1. Aircraft parts
2. Automobile parts
3. Fixture parts
4. Medical parts
5. Petro chemical parts
6. Education parts

Features Of High Quality RF Shield

1. High precision
2. Short processing time
3. Easier customized/personalized

Why Choose Us

Our Advantages

1. High-Performance Shielding in Compact Designs

Precision stamping allows for ultra-thin shields (as low as 0.1mm) that fit into space-constrained devices like smartphones, wearables, or automotive electronics.

Example: A custom-stamped copper shield for a 5G base station PCB reduced RFI by 30 dB while occupying just 20% of the volume compared to traditional shielding methods.

2. Cost-Effective Mass Production

Stamping dies are reusable, reducing per-unit costs for high-volume manufacturing.

Example: A stamped aluminum shield for IoT sensors cut production costs by 40% versus CNC machining, with no compromise on shielding effectiveness (tested to IEC 61000-4-3 standards).

3. Enhanced Thermal Management

Metal stamping enables the integration of heat sinks or thermal vias into shields, dissipating heat generated by high-power components while blocking EMI.

Example: A stamped nickel-silver shield for a GPU reduced junction temperatures by 15°C under full load, improving reliability in gaming laptops.

4. Regulatory Compliance and Customization

Shields can be engineered to meet FCC, CE, or MIL-STD-461 requirements, ensuring market access globally.

Example: A custom-stamped beryllium copper shield for a medical MRI system passed IEC 60601-1-2 EMI tests, enabling FDA approval for clinical use.

Techniques Available

• SLA

• SLS

• MJF

• SLM



Q1: Where can I get product & price information?

A1: Send us inquiry e-mail, we will contact you as we receive your mail.

Q2: How long can I get the sample?

A2: Depends on your specific items, within 3-7 days is required generally.

Q3: What kinds of information you need for quote?

A3: Kindly please provide the product drawing in PDF, and will be better you can provide in STEP or IGS.

Q4: What are the payment terms?

A4: We accept 50% as payment deposit, when the goods is done, we take photos for your check and you then pay the balance.

Q5: Are you a trading company or factory?

A5: We are direct factory with 10 experienced engineers and more than 650 employees as well approximate 2,000 square ft. workshop area.

Q6: What shall we do if we do not have drawings?

A6: Please send your sample to our factory, then we can copy or provide you better solutions. Please send us pictures or drafts with dimensions (Length, Height, Width), CAD or 3D file will be made for you if placed order.



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