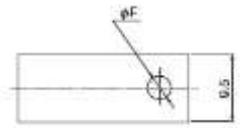
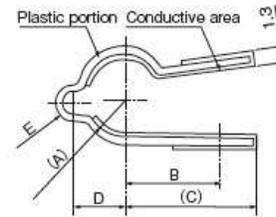
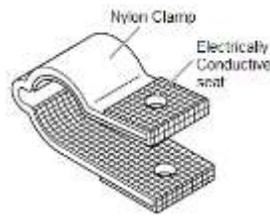


EMC Grounding Components



Prior to using KGS part, please read our "Product Important Notice" at <http://kgs-ind.com/products/product-important-notice/>



FGC for M3 and M4 Screw Size (units in mm)

Part Number	FGC-3 FGC-3 M4	FGC-5 FGC-5 M4	FGC-8 FGC-8 M4
A	R1.8	R3.0	R4.8
B	9.5	10.7	12.5
(C)	13.5	14.7	16.6
D	3.0m	4.3	6.5m
E	R1.5	R2.0	R.2.3
F	M3 diameter: 3.2 M4 diameter: 4.2		
Applicable cable diameter	2.7~3.5	5.0~5.5	8.2~9.0
Plastic material	Nylon 66 (light gray/UL 94V-0)		
Metal material and thickness	Copper 0.03mm		
Operating temperature	-10~65°C		

Frame Grounding Cable Clamps (FGC Series)

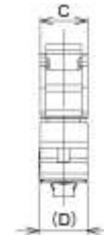
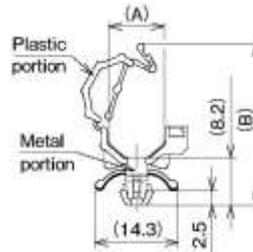
- Provides simultaneous fastening and grounding for coaxial and braid-shielded cables.
- Resin base plated with copper foil.
- High quality materials prevent the clamp from damaging the cable shielding or the insulation sleeve.
- Excellent flexibility insures constant contact pressure and stable contact resistance under heat variation and heavy vibration conditions.
- The contact resistance of the highly conductive copper layer is lower than the nickel or chromium plating on the standard metallic clamps.
- Low weight and space saving solution for dedicated cable grounding.
- Fastening and grounding on power and signal round cables in various applications where electrical connection between the cable and the grounding circuit is required for EMI shielding or ESD suppression.

New!



Frame Grounding Wire Clamps (FGCS)

- Combination of grounding and clamping with the FG series reduces the overall number of components in an application.
- Plastic and metal portions can be separated for disposal.
- Cables easily detach for improved ease of maintenance.



(units in mm)

Part Number	FGCS-5	FGCS-8
(A)	7.0	9.5
(B)	23.3	27.5
C	5.5	8.5
(D)	5.7	8.7
Recommended board thickness	0.8~1.6	
Applicable cable diameter	5.0~5.5	7.0~8.5
Mounting hole dimensions	4.8 ±0.2	
Plastic material	Nylon 66 (Natural/ UL94V-0)	
Metal material	Tin plated phosphor bronze	
Flame resistance	UL94V-0	

Please request for a specification sheet for detailed product data prior to purchase.



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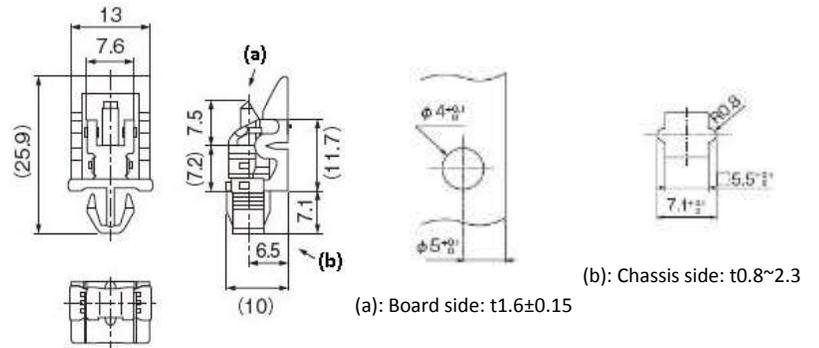
Volume resistivity stated on our EMI absorber flyer is meant for noise control parameters, where the absorber is considered a conductor, but not for insulation performance. Care should be taken when using absorbers. KITAGAWA INDUSTRIES America, Inc. makes no guarantees as to electrical resistivity values and accepts no liability due to short circuits where EMI absorbers are used directly on a PC Board or areas near high voltage such as for power. The products are designed for EMI noise reduction for electronics. This is not recommended for applications involving human life or extremely high accuracy. Prior to using the products in production, please verify their performance or adhesive strength of PSA for long term use. Avoid applying any external stress such as bending or high amounts of tension. Note when the absorber products are cut, bent, or pulled, there may be a possibility of creating cracks. For storage, keep products in a cool, dry, well-ventilated area at room temperature and avoid high temperatures, humidity, and direct sunlight.

Please contact the sales department at KITAGAWA INDUSTRIES America, Inc. for the use of our products prior to selecting the parts for your application.



Frame Grounding Edge Spacer (FGES Series)

- Provides simultaneous support and grounding with quick release capability for PC board assemblies where frequent inspection or removal is expected.
- Light-weight PPE resin base provided with a tinned phosphor bronze conductive strip.
- High quality materials with excellent flexibility provide constant contact pressure and stable contact resistance under heat variation and heavy vibration conditions.
- Single piece with snap-on mounting capability - materials and labor saving solution to replace the classical screw assembled metal spacers.
- Snap-on card edge spacers provide support for printed circuit boards with quick release capability in applications where electrical connection between elements is required for EMI shielding or ESD suppression.
- Ideal labor saving solution for high volume electronic packaging applications.
- Compatible for using in combination with various types of hinged card spacers and corner posts (PHD-10 and KGCP-10).



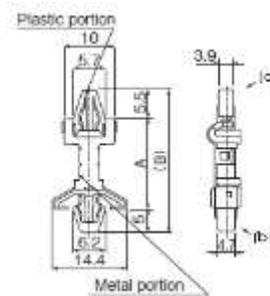
(units in mm)

Part Number	FGES-10
Recommended board thickness	(a): 1.6 ± 0.15 (b): $0.8 \sim 2.3$
Mounting hole diameter	(a): 4.0 (b): 4.8
Plastic material	PPHOX (Black/ UL94V-0)
Metal material and thickness	Tin plated phosphor bronze 0.2
Flame resistance	UL94V-0



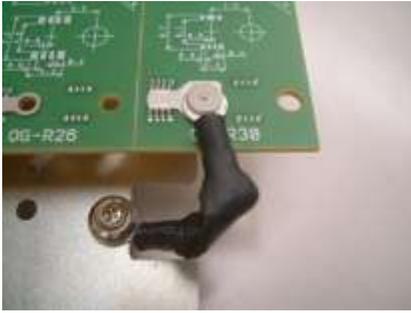
Frame Grounding Spacers (FGS Series)

- Light-weight PPE resin base provided with a tinned phosphor bronze conductive strip.
- High quality materials with excellent flexibility insure constant contact pressure and stable contact resistance under heat variation and heave vibration conditions.
- Single piece with snap-on mounting capability - materials and labor saving solution to replace the classical screw assembled metal spacers.
- Convenient fitting on various inter-board spacing sizes.
- Snap-on card spacers provide support for printed circuit boards fastening to the chassis or base plates in applications where electrical connection between elements is required for EMI shielding or ESD suppression.
- Ideal labor saving solution for high volume electronic packaging applications.



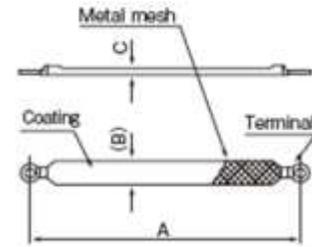
(units in mm)

Part Number	FGS-3S	FGS-4S	FGS-6S	FGS-8S	FGS-9S
A	9.8	11.4	14.4	17.7	20.0
B	20.3	21.9	24.9	28.2	30.5
Recommended board thickness	(a): $1.6 \sim 2.0$ (b): $1.0 \sim 2.0$				
Mounting hole diameter	(a): 4.0 (b): 4.8				
Plastic material	PPHOX (Black/ UL94V-0)				
Metal material	Tin plated phosphor bronze				
Flame resistance	UL94V-0				



Frame Grounding Wire Mesh Straps (FGM Series)

- Excellent impedance characteristics at high frequency range.
- Extra-thin flexible wire mesh with tin plated connection terminals
- Custom sized mesh straps available upon request.
- Various applications where electrical connection between fixed/mobile or removable elements of the assembly is required for EMI shielding or ESD suppression.



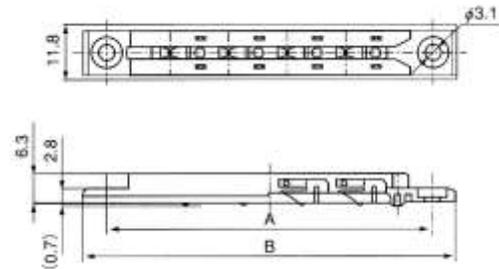
FGM for M3 and M4 Screw Size (units in mm)

Part Number	FGM-50	FGM-100	FGM-150	FGM-200
A	50.0	100.0	150.0	200.0
B	8.5			
C	2.5			
Material	Tin plated copper wire mesh			
Mounting options	Available in M3 or M4 size screw hole			
Insulation	Polyolefin shrink tubing (Terminals: R2-3 ring, standard for M3 size screw; M4-5 available on request)			



Frame Grounding Guide Rails (FGR Series)

- Molded black polycarbonate rail with spherical metal fingers provides simultaneous rigid guiding support and continuity of the ground draining circuit for the P.C. boards.
- Holds cards firmly on designated positions in the package while the pressure developed by the metal fingers insures constant contact between chassis and the printed circuit for excellent current package.
- Special spherical profile of the contact fingers prevents any scratching effect on the contact surface of the printed circuit (wiping action).
- Contact resistance does not vary in the heat cycle test and remains stable under heavy vibration conditions.
- Easy to assemble and fasten by snap-on rivet or screw mounting and very convenient for fast packaging and servicing operations.
- Guiding, fastening and grounding of P.C. boards in various single-card or rack-package applications where electrical connection between the circuit on board and the frame (chassis) is required for EMI shielding or ESD suppression.



FGR for M3 Screw Size (units in mm)

Part Number	FGR-80WSP
A	70.0
B	80.0
Plastic material	Polycarbonate (Black/ UL94V-2)
Metal material and thickness	Tin plated phosphor bronze 0.2
Applicable board thickness	1.6 ±0.1
Flame resistance	UL94-V2 (UL94-V0 on request)

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