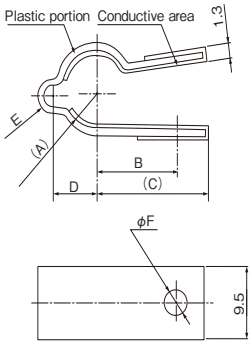
EMC Grounding Components

Frame Grounding Cable Clamps: FGC Series

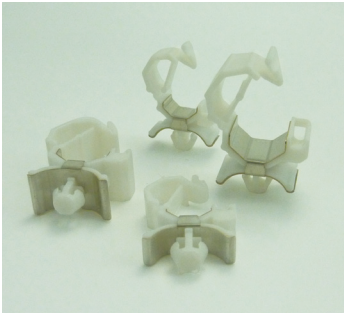


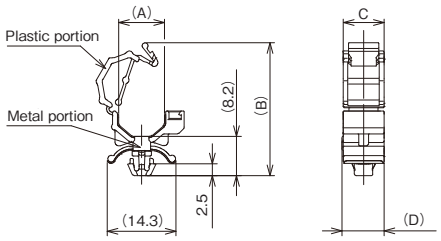
- Cable fastening, EMI grounding clamp; simultaneously ground shielded cables and fix into place
- High quality nylon clamp plated with copper for electrical connection to be used with a metal screw
- Effective for ESD suppression as well
- Available screw hole size options: M3 or M4
- Cable clamps (no metal for grounding) also available: NK series clamps and UV/heat resistant clamps KCA series

Unit: 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	3.0	4.3	6.5
E	R1.5	R2.0	R.2.3
F (screw hole diameter)	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, UL94 V-0)		
Conductive material and thickness	Copper, 0.03mm		
Operating temperature	-10 ~ 65°C		

Frame Grounding Wire Clamps: FGCS Series





- Snap-mount, locking cable grounding clamps
- Clamp allows for easy installation and cable maintenance
- Clamp features a soft lever to reduce repetitive stress on fingers while maintaining strong, reliable lock
- Plastic-snap-mount clamps without metal for grounding available: LBWS Series locking clamps, VLBWS Series plug-in-mount locking clamps, and GRBWS-E Series re-useable clamps

Units: mm

Part number	FGCS-5	FGCS-8
(A)	7.0	9.5
(B)	23.31	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, UL94 V-0)	
Metal material	Tin-plated phosphor bronze, 0.2mm thick	
Operating temperature	-10 ~ 65°C	

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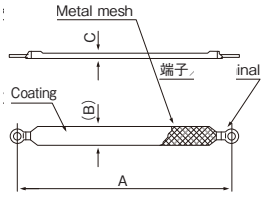
Frame Grounding Wire Mesh Straps: FGM Series

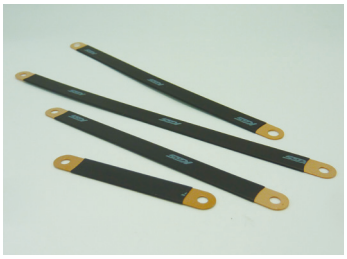


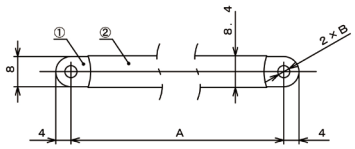
- EMI grounding strap to connect PCBs, panels, and cable shields to another ground plane
- Interior wire mesh covered with insulating layer
- Wire mesh allows for larger surface area for noise to travel, low impedance for high frequencies
- Effective for ESD suppression
- Available screw hole size options: M3 or M4; larger M5 size available upon request

Units: mm

Part number	FGM-50-M3 FGM-50-M4	FGM-100-M3 FGM-100-M4	FGM-150-M3 FGM-150-M4	FGM-200-M3 FGM-200-M4
A	50	100	150	200
(B)	8.5			
C	2.5			
Inner material	Tin-plated copper wire mesh, 0.12mm diameter			
Insulation	Heat shrink tubing, black			
Terminal	Ring, M3 or M4 screw size			
Operating temperature	-40 ~ 85°C			

Frame Grounding Copper Straps: GFGST Series





- Low impedance, flat copper grounding strap for excellent EMC grounding
- Lightweight, flexible straps allows for easy installation in tight spaces
- Higher grounding reliability than high impedance pigtail wires
- Available screw hole size options: M3 or M4

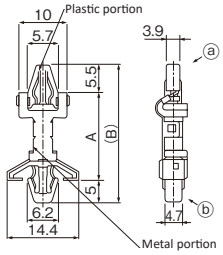
KGS generally recommends short, wide ground paths for low impedance and high mutual inductance (resulting in good EMI performance).

Impedance properties (Ω)		
Frequency range (MHz)	GFGST-50-8-M3	GFGST-100-8-M3
1	0.13	0.28
25	3.19	7.01
100	12.79	28.38
500	72.03	225.57

Units: mm

Part number	GFGST-50-8-M3 GFGST-50-8-M4	GFGST-100-8-M3 GFGST-100-8-M4	GFGST-130-8-M4	GFGST-150-8-M3 GFGST-150-8-M4	GFGST-220-8-M4
A	50	100	130	150	220
B	M3 or M4 size				
Conductive material	Tough pitch copper, 0.1mm thickness				
Insulation	Heat shrink tubing, black				
Surface resistance	0.002 Ω (measured using GFGST-50-8-M3 between terminals)				
Operating temperature	-40 ~ 85°C				

Frame Grounding Spacers: FGS Series



- Snap-mount EMI grounding spacers
- Simultaneously allows for even spacing between two PCBs or PCB to metal chassis while also grounding the PCB
- Also effective for ESD suppression
- Quick and simple snap-in installation
- PCB spacers with no metal also available: WLS series double locking spacers, KGLS-S series locking card spacers

Units: mm

Part number	FGS-3S	FGS-4S 1	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 ~ 2.0 b: 1.0 ~ 2.0				
Mounting hole diameter	a: 4.0 +0.1/-0 b: 4.8 +0.1/-0				
Plastic material	Nylon 66 (black, UL94 V-0)				
Metal material	Tin-plated phosphor bronze, 0.15mm thickness				
Operating temperature	-10 ~ 65°C				