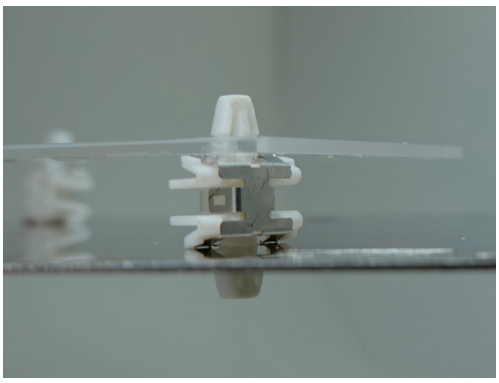
FG SPACER/ FGS-HD-3S

RoHS 10 2015/863/EU



New EMC grounding spacer engineered with residual flux removal mechanism

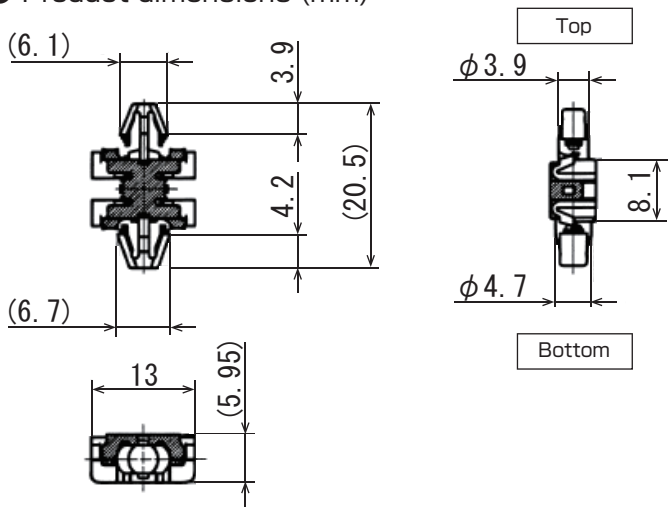
- Frame ground reinforcement spacer suppresses EMC noise and improves electrostatic resistance
- Functions as both a spacer between the PCB and chassis as well as for frame grounding
- Offers cost advantages over screw-mount PCB collar spacers by decreasing the number of components and streamlining installation
- Uniquely engineered structure helps eliminate residual flux and oxidation from the PCB/metal surface.

Specifications

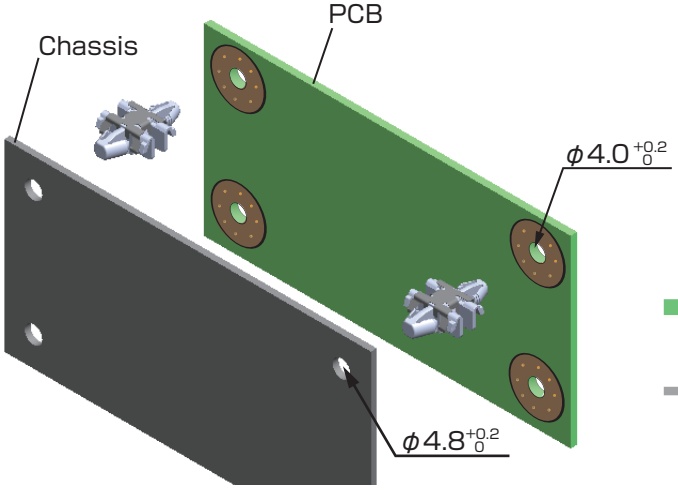
	Top	Bottom
Panel thickness	t1.6～2.2㎜	t 0.8～1.2㎜
Mounting hole size*	ϕ4.0+0.2/0㎜	ϕ4.8+0.2/0㎜
Spacing height	8.1㎜	
Initial snap removal force	Min 38N	
Initial DC resistance	Max 100mΩ	
Operating temperature range	-40℃～85℃	

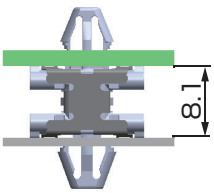
*The mounting hole size differs between the Top and Bottom.
It is recommended to clearly identify in the work instructions.

Product dimensions (mm)

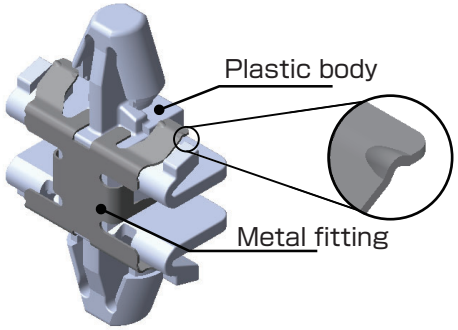


Mounting specifications (mm)





Mechanism to remove residual flux



- For correct and safe uses of our products, please refer to parts specifications and test reports for further details on its features.
- The specifications are for reference only, and not a guarantee. Information may change without notice.
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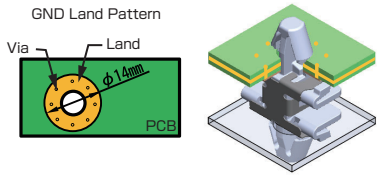
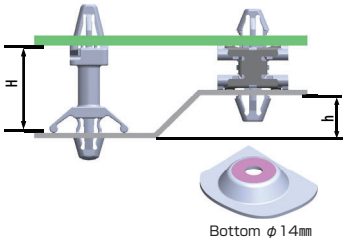
Frame Grounding Spacer/ FGS-HD-3S

Design Tips



Position the mounting holes so the contact spring interfaces directly with the PCB's ground plane. This layer should be electrically connected to the PCB's inner ground planes through vias.



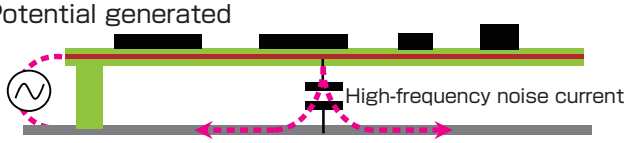
To compensate for height differences between the PCB and the metal panel, modify the metal sheet through bending or stamping.

Effects on EMC

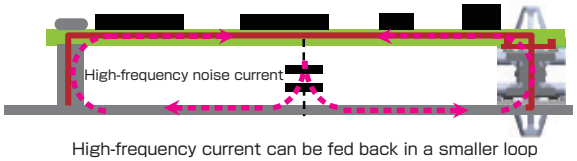
① Reduction of radiated noise from unintended antennas between PCB and metal plate

Potential difference between the PCB ground and metal plate causes high-frequency currents to flow to the metal plate through stray capacitance. This current causes the plate itself to act as a noise antenna and radiate noise. By matching the potential of the PCB and metal plate with the grounding spacer, high-frequency current can be suppressed.

Potential generated



Potential reduced



High-frequency current can be fed back in a smaller loop

② Improvement for ESD resistance

Electrically connecting PCB ground to the metal plate mitigates high-frequency electric fields induced by ESD, reducing the risk of adverse effects on onboard ICs.

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