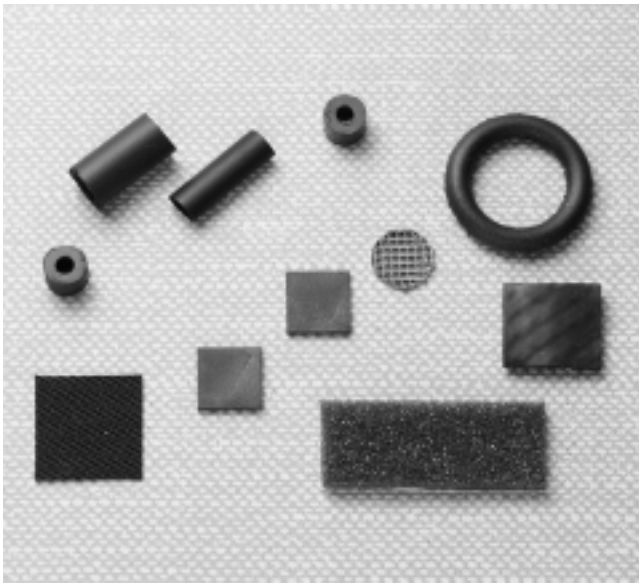
Flexible Electromagnetic Wave Absorber (EXSOB Series)

General Description

Electromagnetic noise may affect the electronic devices. and EMC has been recognized as one of the serious social problems.
AMIC has developed the EXSOB, a wide band RF wave absorber for preventing EMI/EMC problems, which is lightweight, thin and flexible. Much absorption loss (dB) provide you with many applications in EMI/EMC field such as mobile phone, LCD cable, military, and problems of SAR, etc.
You can choice the size, absorption frequency, thickness, and shape, which you want you want, then adhere or wrap the EXSOB on the components which you want to absorb. The application frequency range of the EXSOB is from 500 MHz to 6 GHz. The characteristics of EXSOB are best of absorbers in Korea, and one of the excellent absorbers in the world.



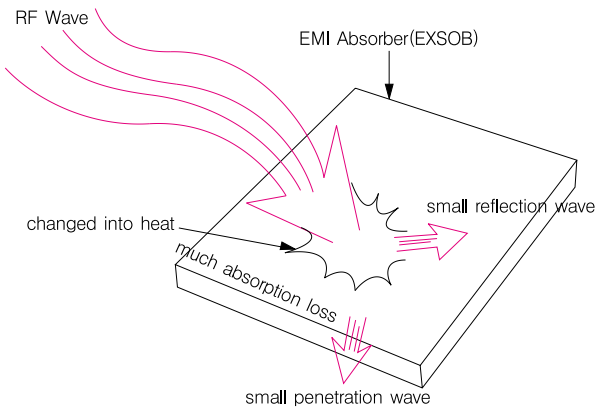
Applications

- Radiated noise suppression in all kind of electronic equipment and its internal interference problems
- Mobile communications equipment, Wireless equipment
- Intra-system application to suppress noise in quasi microwave (1~3 GHz) ranges
- Military
- Radiation noise suppression in all kinds of electronic equipment

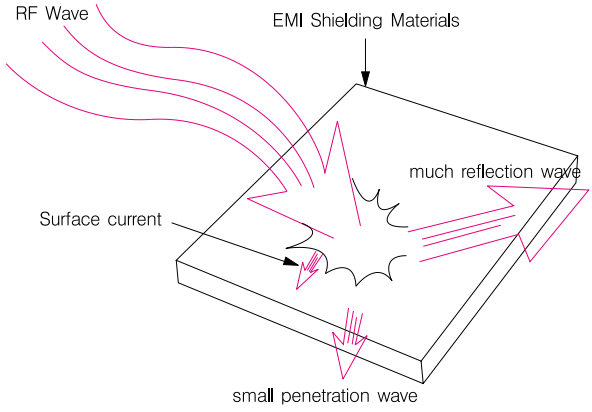
Specifications

Property \ Item	V0 (for 800MHz), V1 (for 1.5GHz), V2 (for 2.5GHz), V3 (for 3.5GHz)					
	EXSOB-025	EXSOB-050	EXSOB-080	EXSOB-100	EXSOB-120	EXSOB-150
Material	Elastomer + Microwave Absorbing Material (Metal Powder) (Option : Adhesive Tape, Conductive Mesh Tape)					
Thickness (mm)	0.25	0.50	0.80	1.00	1.20	1.50
Adhesive type	A type : 100㎛ silicone adhesive, AI type : 50㎛ silicone adhesive					
Standard Size (mm)	210 x 300 (If you want other thickness and shape of EXSOB, please contact AMIC)					
Operating Temp. (℃)	-30 ~ 150					
Electrical Surface Resistance (Ω · □)	1.0×10^6					
Flammability	Non Flammable					
Frequency Range	500 MHz ~ 6 GHz					
Hardness (Shore A)	85 ± 5					
Density (g/cm^3)	3.8 ± 0.5					
Tensile Strength (kgf/cm^2)	V0 : 20 V1 : 28 V2 : 35					
Characteristics	Flexible, Lightweight, Thin, Wide Band					

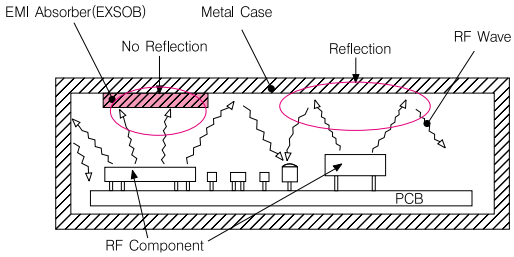
The Concepts of RF Absorber



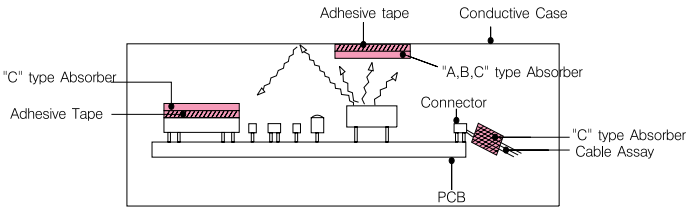
The Concepts of RF Shielding



How to Work

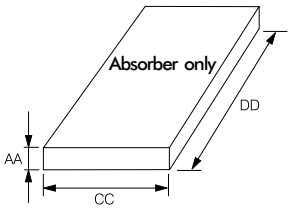


How to Select Absorber Type



■ RF Wave have to contact the RF Absorber in first hand before the RF Wave contact any metal substrate.
That means RF wave energy will be decreased its energy when it contact to RF Absorbor in the near field EM domains.

■ How to Order

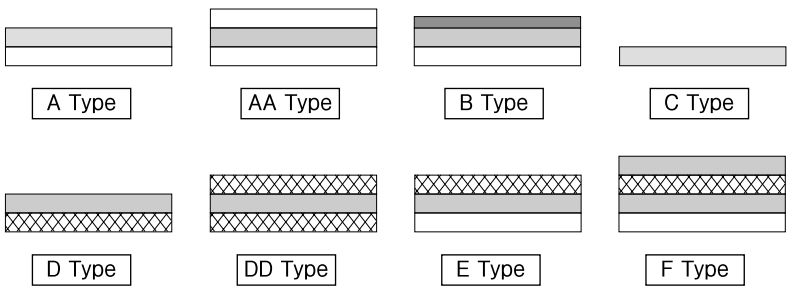


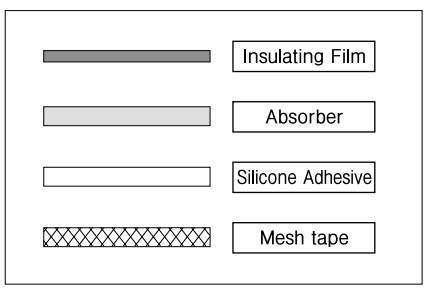
P/N : EXSOB - AAA - BBB - CCC - DDD - EEE - FFF
① ② ③ ④ ⑤ ⑥ ⑦

① Serial Number
② Thickness(mm) : 010(0.1mm), 025, 038, 050, 068, 080, 100, 120, 150
③ Mateial : V0 (800MHz), V1(1.5GHz), V2(2.5GHZ)
④ Width(mm)
⑤ Length(mm)
⑥ Construction : A, A1, AA, A1A1, B, C, D, DD, E, F
⑦ S : Press, None : None Press

EX) EXSOB - 050 - V0 - 200 - 300 - D - S

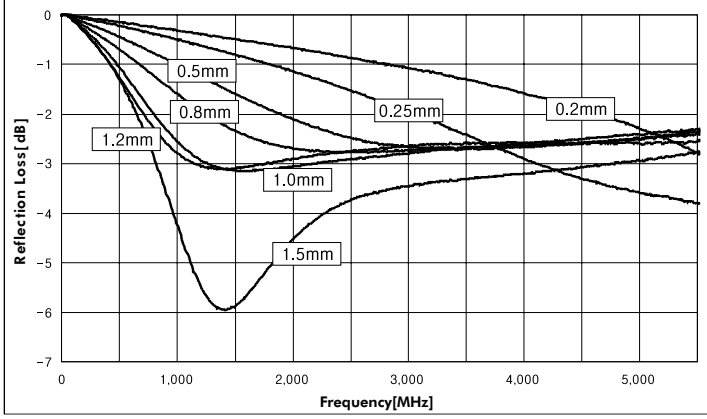
■ Constructions

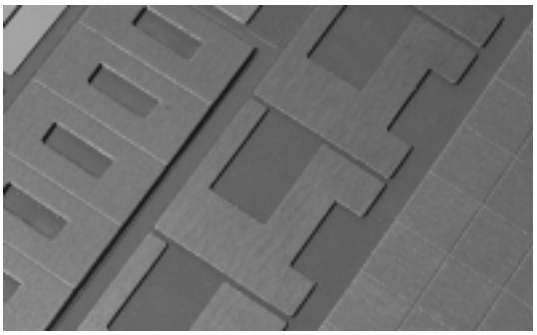




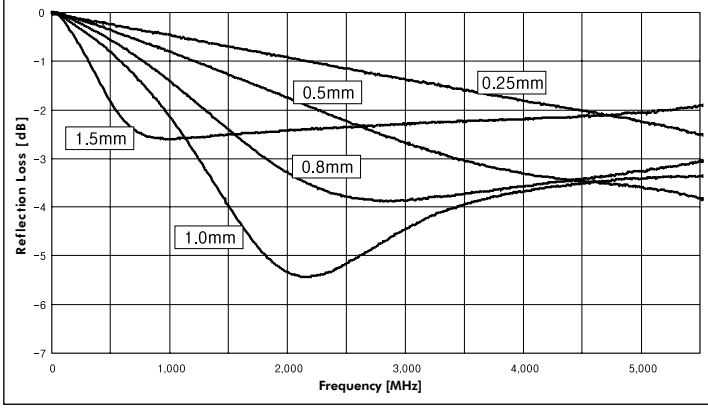
Absorbing Properties Vs Materials with Various thickness

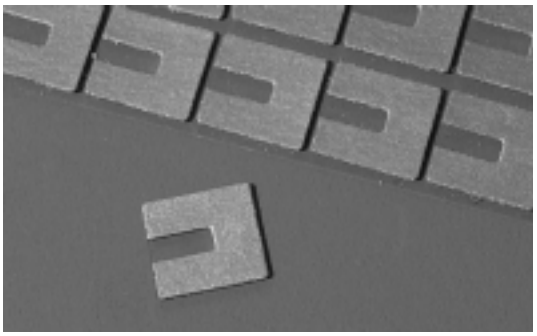
Material : V0 (Typical Value)





Material : V1 (Typical Value)





Material : V2 (Typical Value)