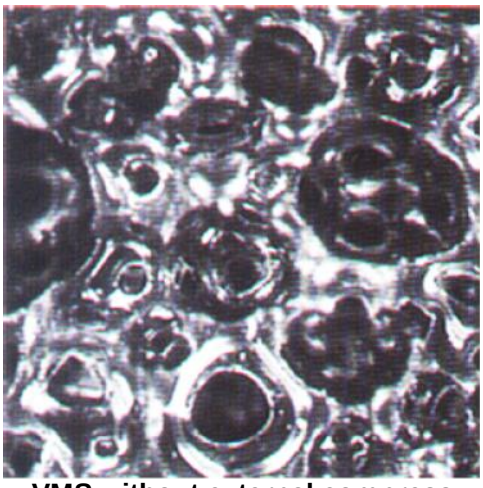
VMS (Vibration Management Sheet)

High Performance Vibration Management Sheet

The VMS has low rebound characteristics, boasting excellent protection foam vibration and shock in its parts.

Product Description

- ITF's VMS(Vibration Management Sheet) is an excellent shock absorbing and vibration damping polymer urethane foam. Its properties help protect your important parts and components by mitigating external shocks and vibration. The VMS is soft and flexible to be adapted to specific customers' requirements.



VMS without external compress

Features

- Excellent high shock absorption
- Ultra thin foam : Minimum thickness ~0.01mm
- Constant and uniform distribution
- Excellent durability
- Easily compressed for use where flexibility is a key requirement
- ROHS Compliant

VMS with external compress(75%)

Materials

- Polymer Urethane

Applications

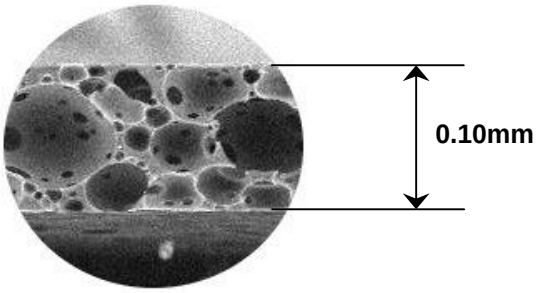
- Absorbs shock when applied to portable electric devices and household appliances.
- Excellent **shieding**, shock absorption and anti-vibration when applied to LCD gaskets for displays
- Enhancement of acoustic shielding, prevention of cracking sounds and buzzing prevention when applied to ringers and speakers
- Motor vibration absorption and elimination, improved shielding to machine mounts and anti-vibration when applied to motors

VMS (Vibration Management Sheet)

Products

Properties		Unit	Series					
			PFS-IR	PFS-IM	PFS-IS	PFS-IT	PFS-IMH	PFS-IO
Thickness		mm	0.5~3.0	0.3~3.0	0.5~3.0	0.2~3.0	0.5~3.0	0.5~3.0
Density		g/cm^3	0.23	0.32	0.23	0.34~0.66	0.32/0.42	0.23/0.32
Compressible Ratio(Max.)		%	65	65	75	35~65	65/55	75/65
Color			Black	Black	Black	Black	Black	Black
Compression Force Deflection	25%	kgf/cm^2	0.08	0.12	0.08	0.13~0.34	1.5/2.5	0.25/0.35
	50%	kgf/cm^2	0.16	0.30	0.16	-	-	0.50/0.65
Hardness			40	45	40	35~45	45~65	30/35
Compression Set		%	<5	<5	<5	<5	<5	<5
Tensile Strength		kgf/cm^2	-	-	-	-	-	3.5/4.5
Elongation		%	-	-	-	-	-	140/180
Tear Strength		kgf/cm	-	-	-	-	-	0.4/0.4
Dimensional Stability		%	<1	<1	<1	<1	<1	<1
Surface Resistivity		Ω/sq.	1X10^{12}	1X10^{12}	1X10^{12}	1X10^{12}	1X10^{12}	1X10^{12}

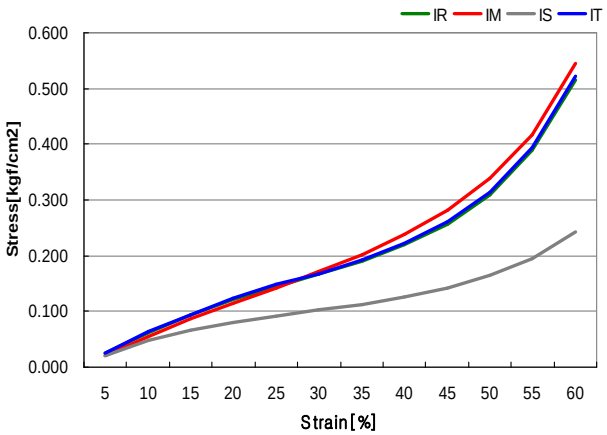
Micro-Foam (X250 SEM Picture)



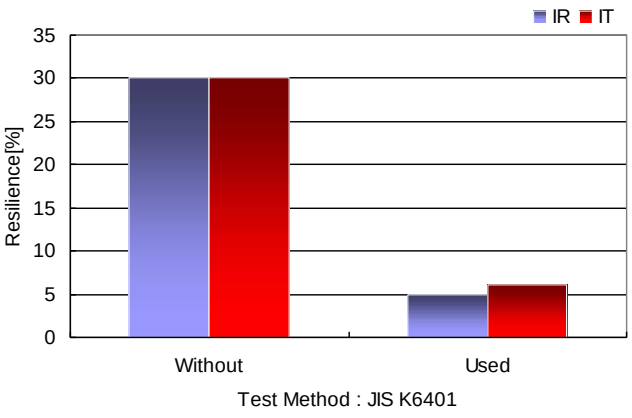
- Thickness : 0.1 (mm)
- Density : 0.28 (g/cm^3)
- Tensile Strength : 1.9 (N/mm^2)
- Elongation : 290(%)
- Tear Strength : 2.0 (N/mm)
- Compression Force Def. : 0.2 (%, 25% Comp.)

Properties of each material

Stress-Strain Curve



Rebound Resilience



Test Method : JIS K6401