

Polycarbonate, bromine-free, flame-resistant insulation sheet  
**SunMorfee™ V**

**What is SunMorfee™ V?**

SunMorfee™V is an eco-friendly (bromine-free) polycarbonate-based flame-resistant insulation sheet. SunMorfee™V has been employed in varied applications such as LCD TV and power supply adapter for note-book PC for long time and proved to be high reliable insulation sheet.



**Point 1** Excellent flame resistance  
(UL File No.E301813)

✓ 0.40~3.0mmt UL94 V-0  
 ✓ 0.10~0.25mmt UL94 VTM-0

**Point 2** Environmentally friendly material

- Without using brominated or phosphate flame retardant agent
- Qualified for RoHS
- Qualified for Blue Angel Mark

**Point 3** Maintains excellent heat stability and the same mechanical properties of polycarbonate resin

RTI at 130°C approved

Heatproof durability for bending, high impact strength, high heat resistance

Revised registration of SunMorfee™ V "RTI(Ele/ Imp/ Str)= 130/ 120/ 130[°C]" (0.1-3mm thickness of material)

**Applications**



Notebook PC



Projector

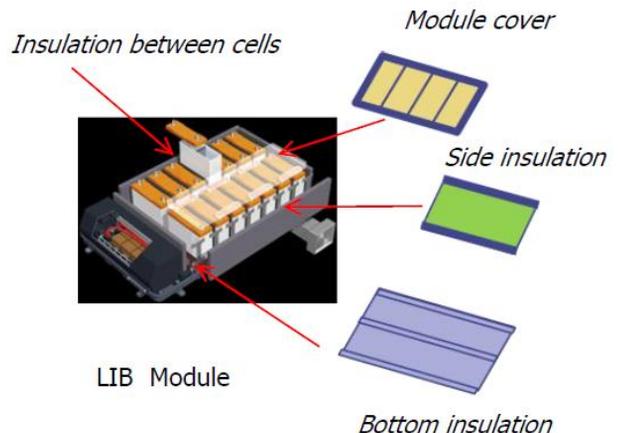


LCD TV



AC Adapter

Best solution to electric insulation separator with thin film and vacuum forming in LIB module.



## Characteristics

Item	Test method	Unit	<i>SunMorfee<sup>TM</sup> V</i>	
Part number	—	—	VS120a (Natural) , VS520a (Black)	
Thickness	—	Mm	0.1~0.25mm (VTM-0)	0.4~0.8mm (V-0)
Specific gravity	JIS K 7112	—	1.23 (Natural)	1.23 (Black)
Glass transition temperature	DSC method	°C	147 (Natural)	147 (Black)
Breakdown voltage	ASTM D149	k V	31 (Natural, 0.43mm) , 26 (Black, 0.43mm)	
Long-term heat resistance (UL RTI registration)	UL	°C	Elec/Imp/Str = 130/120/130 (0.1mm~3mm) (UL file No. E301813)	

\* The above are just measurements, not guaranteed.

## UL registration

Plastics - Component E301813

RP TOPLA LIMITED  
Kanto Office  
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Ota-Shi, Gunma-Ken 373-0805 Japan

Dsg	Color	Min Thk mm	Flame Class	H W	H A	Elec I	Mech I	RTI Str	V Imp	4 Str	9 R	T 5	T I	H D	
														V	C
Polycarbonate (PC) furnished as sheets or film															
VS120a, VS520a	NC, BK	0.070	VTM-0	-	-	80	80	80	3	7	3	-	-	-	-
		0.100-0.25	VTM-0	3	4	130	120	130	-	-	-	-	-	-	-
		0.4	V-0	3	3	130	120	130	-	-	-	-	-	-	-
		3.0	V-0	2	3	130	120	130	-	-	-	-	-	-	-

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## Product line

Thickness	Width	Length
0.10mm	600mm	600M
0.20mm	600mm	300M
0.25mm	600mm	240M
0.43mm	600mm	140M
	1,100mm	
0.50mm	600mm	120M
	1,100mm	
0.80mm	600mm	100M

## Contact info.

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