



**UNICAR SSFX02** extruded thermoplastic shapes offer end users the high impact strength of polycarbonate coupled with EMI/RF shielding and electrical conductivity. Additionally, this material offers a UL 94 V-0 rating at 2.10 mm.

This extruded shape contains uniformly dispersed stainless steel fibers and a non-brominated, non-chlorinated flame retardant.

UNICAR SSFX02 is available in multiple rod and plate configurations by special order and is especially well suited for RF filters and specialty equipment housing applications requiring electrical shielding.

### Typical Physical Properties

Property	Test Method	Unit	Nominal Value*
<b>Mechanical</b>			
Tensile Stress @Yield	ISO 527-2	psi	8,270
Tensile Stress @ Break	ISO 527-2	psi	7,980
Tensile Strain @ Yield	ISO527-2	%	3.8
Tensile Strain @ Break	ISO527-2	%	4.0 to 8.0
Tensile Modulus	ISO 527-2/1	psi	406,000
Flexural Strength	ISO 178	psi	11,600
Flexural Modulus	ISO 178	psi	377,000
Izod Impact (notched)	ASTM D256	ft.-lb./in.	2.3
Unnotched Izod Impact	ASTM D4812	ft.-lb./in.	33.5
<b>Thermal</b>			
CLTE	ISO 11359-2	in/in/°F	0.000037
Glass Transition (Tg)	ASTM D3418	°F	290
Heat Deflection Temp. @ 264 psi	ISO 75-2/Af	°F	257
Heat Deflection Temp. @ 66 psi	ISO 75-2/Bf	°F	277
Flammability	UL 94	-	V-0 @ 2.1 mm
<b>Electrical</b>			
Surface Resistivity	ASTM D257	-	1.0E+2 to 1.0E+3 ohms
Volume Resistivity	ASTM D257	-	1.0E+4 ohm•cm
Shielding Effectiveness	SABIC Test	3.0mm	40.0 to 55.0 dB

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