## Silver Loaded Silicone

EC-S

P & P Technology material reference EC-S is a silicone elastomer with Silver conductive filler. It is tan in colour.

The material is specially compounded to offer excellent physical and electrical properties over an effective temperature range of –50 to + 150°C.

Silicone offers excellent performance over a wide temperature range with good resistance to chemicals and weathering.

Its resistance to mineral based fluids is limited, but it has good splash contact resistance to most mineral oils and greases.

Physical Properties	Test methods	Typical values
Hardness	ASTM D-2240	75 IRHD
Specific Gravity	ASTM D-792	3.20 g/c <sup>3</sup>
Tensile Strength	ASTM D-412	1.25 mPa
Elongation	ASTM D 412	100% minimum
Compression Set	ASTM D-395	30% maximum
72 hrs @ 100°C		
Low Temperature Flexibility	TR10	-55°C
Tear Strength		8.75 N/mm

## **Electrical properties**

Volume Resistivity	Mil-G-83528	0.002 Ω/cm max

## Shielding Effectiveness (Mil-G-83528)

(Mil Std 285 procedure)		
Frequency	Attenuation (dB)	
200KHz	70	
100MHz	115	
500MHz	115	
2GHz	115	
10GHz	115	



