# Oriented Wires in Silicone S-Range



P & P Technology SP, SS, SR, SW & SF ranges of gasket materials consist of Monel, aluminium or phosphor bronze wires embedded into solid silicone, sponge silicone or fluorosilicone with a flame retardant variant also being available.

The material can be supplied in strip form or as a complete gasket with options for self-adhesive tape, compression stops & limit collars.

### Carrier

| SP  | Solid Silicone Elastomer (grey) to ZZ-R-765 2b 40 |
|-----|---|
| SS  | Sponge Silicone (grey) to AMS3195                 |
| SR  | Solid Silicone Fire Retardant (Black) to ZZ-R-765 |
| SG  | Sponge Silicone Fire Retardant (black) to AMS3195 |
| SF* | Fluorosilicone (blue) to Mil-R-25988 Gr5          |
| SE  | Solid Silicone with Fluorosilicone Edge           |

#### Wire

| Monel     | 0.11mm diameter to QQ-N-281 |
|-----------|-----------------------------|
| Aluminium | 0.12mm diameter Alloy 5056  |
| Phosphor  | 0.114mm diameter Cu Sn 6%   |
| Bronze    |                             |

# **Physical Properties**

| Elastomer Hardness | Solid Carrier 35±5 Shore Micro |  |  |
|--------------------|--------------------------------|--|--|
| Compression        | 20% maximum recommended        |  |  |
| Wire Count         | 140±15% per cm²                |  |  |
| Temperature Range  | -65°C to +200°C                |  |  |

## **Pressure Sensitive Adhesive**

| Thickness          | 0.07mm                      |  |  |
|--------------------|-----------------------------|--|--|
| Release Liner      | White silicone coated paper |  |  |
| Adhesive Type      | Modified acrylic            |  |  |
| Adhesion - Initial | 13N / 25mm                  |  |  |
| Adhesion – Aged    | 31N / 25mm                  |  |  |
| Temperature Range  | -30°C to +130°C             |  |  |

Shielding Effectiveness (dB) - in accordance with Mil Std 285 compression between 12-15%.

| Frequency | Attenuation | Field |                                      |
|-----------|-------------|-------|--------------------------------------|
| 10KHz     | 55          | Н     | Storage                              |
| 100KHz    | 83          | Н     | Non Adhesive version 10 years        |
| 1MHz      | >102        | Н     | Adhesive version 1 year              |
| 10kHz     | >121        | E     |                                      |
| 1MHz      | >141        | E     | * The SF version is recommended      |
| 10MHz     | >120        | E     | where the gasket may be in contact   |
| 100MHz    | >140        | Е     | with mineral oils, etc.              |
| 400MHz    | >102        | Р     |                                      |
| 1GHz      | 95          | Р     | * The Monel version meets salt spray |
| 10GHz     | 60          | Р     | Test to ASTM B117-03                 |



