

PURE SILVER FILLED SILICONE / FLUOROSILICONE

Nolato Jabar Series 808 / 818

DESCRIPTION

Nolato Jabar pure silver filled materials are a unique blend of silicone or fluorosilicone elastomer and conductive, pure silver particles, forming a highly flexible and extremely high conductive matrix. The highest of conductivity within the M83528 family of materials, the pure silver fillers enable the elastomer seals to meet the most demanding aerospace, military, and commercial applications. Specify fluorosilicone for those applications requiring fuel, hydraulic fluid, and solvent resistance.

APPLICATIONS

Every Batch of Nolato Jabar Series 808 and 818 is evaluated in our DLA approved Lab for compliance to Mil-DTL-83528 level standards. Nolato Jabar produces the above materials in extruded, molded sheet, die cut, and custom molded forms. Certain applications require the addition of supporting fabrics, or mesh reinforcements to withstand abusive applications. These alternatives are also available. Please contact your Nolato Jabar representative.

TECHNICAL PROPERTIES

Inspection Criteria	UM	Test Method	Performance 808	Performance 808	Performance 818
Conductive Filler			Ag	Ag	Ag
Elastomer Binder			Silicone	Silicone	Fluorosilicone
Mil-Dtl-83528 Material Type			Type E	Type H	Type F
Maximum Continuous Use Temp.	Max Min	° C ° C	200 160	200 160	200 160
Specific Gravity	+/- 13 %	ASTM D792	3.50 +/- 0.45	4.00 +/- 0.52	4.00 +/- 0.52
Hardness; Shore A	+/- 7	ASTM D2240	65 +/- 7	80 +/- 7	75 +/- 7
Tensile Strength (un-reinforced)	#/in ² min	ASTM D412 Die C	300 (2.07)	400	250 (1.72)
Elongation % (un-reinforced)	%	ASTM D412 Die C	200 / 500	90 / 290	100 / 300
Compression Set	% max	ASTM D395	45.0	60.0	60.0
Tear Strength (un-reinforced)	#/in min	ASTM D624 Die C	50 (8.75)	60	40 (7.00)
Volume Resistivity	Ohm-cm	MIL-DTL-M83528	0.002	0.002	0.002
Low Temp Flex	TR 10 / TR 70 ° C	MIL-DTL-M83528	-70 ° C	-70 ° C	-70 ° C
Shielding Effectiveness		MIL-DTL-M83528			
20 MHz			127.6	119.6	125.2
30 MHz			129.3	128.2	128.4
40 MHz			139.1	137.8	138.7
60 MHz			138.7	138	138.3
80 MHz			149.3	147.4	145.4
100 MHz			148.8	146	145.7
200 MHz			141.3	143.4	142.4
400 MHz			139.5	141.7	143.7
600 MHz			134.6	135.8	141.9
800 MHz			141.5	143.3	142.3
1 GHz			137.6	139.8	139.5
2 GHz			122.2	124.4	124.2
4 GHz			116.5	119.7	119.5
6 GHz			117.5	119.5	119.4
8 GHz			116.6	119	119.5
10 GHz			117.1	119.7	119.3
Electrical Stability, ohm-cm, max.					
Heat Aging		MIL-DTL M83528	0.010	.008	0.010
Volume Resistivity During Vibration		MIL-DTL M83528	0.010	.006	0.010
Volume Resistivity After Vibration		MIL-DTL M83528	0.002	.005	0.002
Post Tensile Set Volume Resistivity		MIL-DTL M83528	0.010	.008	0.010
EMP Survivability, kA per linear inch of perimeter		MIL-DTL M83528	>0.9	>0.9	>0.9
RoHS Compliant			Yes	Yes	Yes
Color			Natural Tan	Natural Tan	Natural Tan