

Ultra-Vanshield® RFI/EMI dual elastomer shielding gaskets

ORDERING

STANDARD PRODUCTS

All shielding gaskets shown in this catalog are available with optional conductive outer layers and specific product treatments. To construct a discrete part number for your application, follow the guidelines below. Characteristic suffix descriptors are added to the desired part number found in the preceding product pages. Profile tolerances standard per RMA Class Sil A2. Closer tolerances available upon request.

Part# 1020-01-D50-BLU-NPS-SPL-1200

PART NUMBER FROM CATALOG

CONDUCTIVE OUTER LAYER

- 01 - Standard Silver (Ag)
- 02 - Silver Plated Copper (Ag/Cu)
- 03 - Silver Plated Aluminum (Ag/Al)
- 04 - Silver Plated Nickel (Ag/Ni)
- 05 - Silver Plated Glass Spheres (Ag/GL)
- 06 - Gold (Au)
- 07 - Copper (Cu)
- 08 - Nickel (Ni)
- 09 - Carbon, Low Resistivity (CL)
- 10 - Carbon, Standard (CS)
- 11 - Silver in Fluorosilicone (AgFK)
- 12 - Silver in EPDM (AgEP)
- 13 - Silver in Fluorocarbon (AgFC)
- 15 - Silver, Abrasion Resistant (AgX)
- 16 - Blackened Silver (Ag-Dk)
- 17 - Silver Aluminum (AgAl-Dk)
- 18 - Other

LENGTH

- Standard - 1,200 Inches
- Custom Length (in Inches)
- For O-rings - Length = Circumference

PACKAGING

- SPL - Spooled on a Reel
- CTL - Cut To Length
- COI - Coiled Loosely
- BND - O-Rings, bonded
- FRM - Mitre-spliced window frame
- SPEC - Special, Custom Finishing

MOUNTING TAPE OR CLIP

- NPS - No Pressure Sensitive Tape
- PSA - Pressure Sensitive Tape (min. width 0.1")
- EPSA - Extended Pressure Sensitive Tape **(see below)*
- CPS - Conductive Pressure Sensitive Tape
- ECPS - Extended Conductive Pressure Sensitive Tape **(see below)*
- DCPS - Double Coated Semi-Rigid Pressure Sensitive Tape for Stiffness Enhancement
- CLP - Mounted Clip
- SPEC - Special

CORE MATERIAL

- ORA - Orange (STD)
- GRA - Gray
- WHI - White
- BLU - Blue
- VIO - Violet
- BLA - Black
- RED - Red

DUROMETER

- D30 - 30 Shore A Durometer
- D50 - 50 Shore A Durometer (Standard)
- D75 - 75 Shore A Durometer
- FR - Flame Resistant, 60 duro. (Brown Only)
- SPG - Closed Cell Silicone Sponge
- LOG - Low outgassing silicone

ENGINEERING TEST KIT



An EMC test lab kit which is capable of immediate problem mitigation from the generous supply of each style included. There are 32 feet each of nine distinct part numbers, representing the most common styles for electronic enclosure gap ranges from 0.020" to 0.300". Installation guidelines and further product information are included.

*** optional "Quick-Start" easy removal extended adhesive liner (ECPS& EPSA above)**



An extended pressure sensitive adhesive protective liner option is now available on all Ultra-Vanshield® RFI-EMI shielding gaskets. The extra wide tear-away liner protrudes outboard of the gasket body for easy and fast removal during installation.



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MATERIAL PROPERTIES

Each Ultra-Vanshield® shielding gasket profile shown in the preceding product section is available with a wide selection of conductive outer jacket choices. To construct a discrete part number for your application, add one of the suffixes shown below after the part number.

DESCRIPTION	TEST SPECIFICATION	MATERIAL COMPOUND DESIGNATION						
		VC3200	VC3220	VC3240	VC3260	VC3280	VC3300	VC3600
Suffix (see "ordering" on page 15)	Vanguard	-01	-02	-03	-04	-05	-08	-09
Conductive Matrix (Outer Jacket Material)	Vanguard	Pure Ag in Silicone	AgCu in Silicone	AgAl in Silicone	AgNi in Silicone	Ag Glass in Silicone	Pure Ni in Silicone	Low Resis- tivity Carbon in Silicone
Elastomeric Support Matrix (Inner Core Material)	Vanguard	Silicone	Silicone	Silicone	Silicone	Silicone	Silicone	Silicone
Shielding Effectiveness (dB)	MIL-G-83528							
Frequency: 200 KHz-H-field	para. 4.6.12	65	65	60	65	55	65	50
100 KHz E-field		120	110	110	100	90	75	75
500 MHz E-field		120	110	100	100	90	100	75
2 GHz Plane wave		110	100	95	95	90	95	70
10 GHz Plane wave		110	100	90	95	90	110	65
Volume Resistivity (ohm-cm)	ASTM D991	.001	.003	.005	.006	.010	.050	.500
Surface Resistivity (ohm-Lin.in.)	V.P.C method V908	.150	.300	.400	.500	.750	2.00	10.0
Durometer (Shore A)	ASTM D2240	50	50	50	50	50	55	70
Tensile Strength (p.s.i.)	ASTM D412	1,500	1,500	1,500	1,500	1,500	1,500	1,200
Elongation (%)	ASTM D412	320	320	320	320	320	320	300
Tear Strength (p.p.i.)	ASTM D624	120	120	120	120	120	120	100
Compression Set (room temp.)	1,000 hrs.@72°F	0%	0%	0%	0%	0%	0%	0%
Compression Set (dry heat)	70 hrs.@300°F	12%	12%	12%	12%	12%	12%	10%
Life Test (vol. res. after heat aging)	1,000 hrs.@275°F then 48 hrs.@340°F	.004	.015	.018	.012	.027	.500	.650
Humidity Test (vol. res. after steady-state exposure to moisture)	MIL-STD-202F Method 103B test condition No. 4 240 hrs.@104°F 90-95%R.H.	.006	.020	.025	.021	.020	.400	.550

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MATERIAL PROPERTIES

Each production batch of Ultra-Vanshield® elastomeric compound is lot controlled for the specific mechanical and electrical characteristics shown. All test data is analyzed and kept on file to assure product consistency within a lot, and from lot-to-lot.

DESCRIPTION	TEST SPECIFICATION	MATERIAL COMPOUND DESIGNATION						
		VC1851	VC3400	VC3450	VC3500	VC3205	VC3210	VC3650
Suffix (see "ordering" on page 15)	Vanguard	-10	-11	-12	-13	-15	-16	-17
Conductive Matrix (Outer Jacket Material)	Vanguard	Standard Carbon in Silicone	Pure Ag in Fluorosilicone	Pure Ag in EPDM	Pure Ag in Fluorocarbon	Abrasion-Resistant Ag in Silicone	Ag in Silicone, Darkened Color	AgAl in Silicone, Darkened Color
Elastomeric Support Matrix (Inner Core Material)	Vanguard	Silicone	Fluoro-Silicone	EPDM	Fluorocarbon	Silicone	Silicone	Silicone
Shielding Effectiveness (dB)	MIL-G-83528							
Frequency: 200 KHz-H-field	para. 4.6.12	30	65	50	55	65	65	65
100 KHz E-field		50	120	80	85	120	120	110
500 MHz E-field		55	120	80	80	120	120	110
2 GHz Plane wave		45	110	75	80	110	120	100
10 GHz Plane wave		40	105	70	75	110	110	90
Volume Resistivity (ohm-cm)	ASTM D991	4.00	.002	.050	.100	.002	.001	.005
Surface Resistivity (ohm-Lin.in.)	V.P.C method V908	60.0	.250	1.40	1.30	.200	.050	.400
Durometer (Shore A)	ASTM D2240	70	50	65	65	45	50	50
Tensile Strength (p.s.i.)	ASTM D412	875	1,200	950	1,800	1,300	1,500	1,500
Elongation (%)	ASTM D412	240	250	210	220	230	320	320
Tear Strength (p.p.i.)	ASTM D624	100	80	170	200	100	120	120
Compression Set (room temp.)	1,000 hrs.@72°F	0%	0%	4%	2%	0%	0%	0%
Compression Set (dry heat)	70 hrs.@300°F	10%	15%	20%	20%	10%	10%	10%
Life Test (vol. res. after heat aging)	1,000 hrs.@275°F then 48 hrs.@340°F	6.00	.005	.220	.190	.004	.002	.008
Humidity Test (vol. res. after steady-state exposure to moisture)	MIL-STD-202F Method 103B test condition No. 4 240 hrs.@104°F 90-95%R.H.	4.50	.005	.300	.200	.005	.004	.016