

EMI /RFI Gaskets for Connectors (2000 Series)

Product Summary

Shielding of MIL Spec., D Sub, audio & video, medical, and RF/Coaxial Connectors to an enclosure bulkhead in a manner that will reduce the ingress or egress of EMI/RFI interference can be accomplished through the use of MAJR connector gaskets. Table 1 depicts the gasket dimensions for the various connector shell sizes. This table also gives the ordering part numbers for the materials offered. The material and physical parameters listed in Table 1 are intended as a guide in determining which product is best suited for the application for which the connector is being used. The choice of elastomer and metal combination used for grounding is dependent upon the intended environment for which the equipment will be operating. Hundreds of different sizes of connector gaskets have been manufactured by MAJR and are available upon request. We can also custom make a connector gasket to your specifications.

Product Application

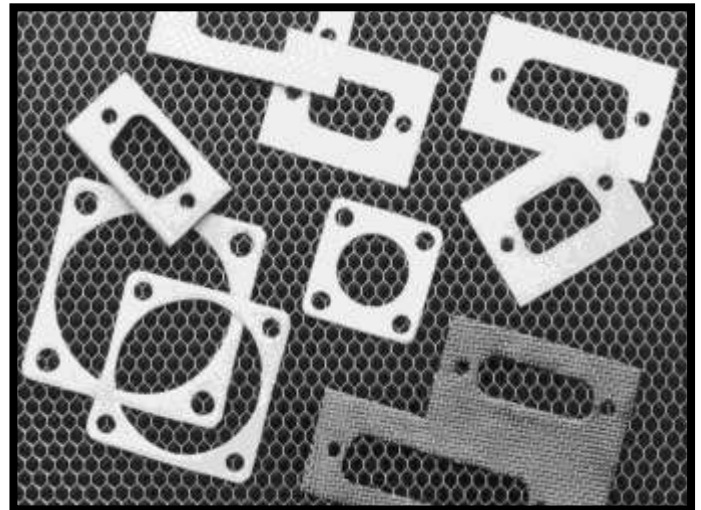
Material Choice: Connector gasket materials are selected to meet strict environmental, mechanical, and electrical requirements of electronic equipment and systems that need to meet MIL-STD-461 / 464 Standards.

Standardization: MAJR flash cuts connector material enabling quick and computer controlled gasket configurations.

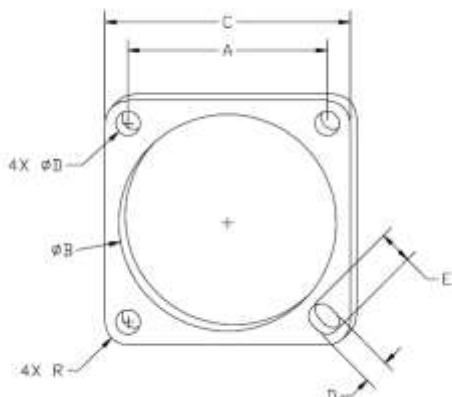
Low Cost: MAJR's connector gaskets offer optimum RF grounding and shielding of connectors at minimal cost.

EMI/RFI Shielding and Environmental Sealing:

Conductive elastomer, oriented wire in silicone, and Radthin materials all enable excellent EMI/RFI shielding and environmental sealing.



EMI/RFI Shielding Connector Gasket — Figure 1



Standard sized gaskets for MIL-38999, MIL-5015, MIL-26482, AN, HT, RF and many other connectors can be found on the following page and on our website at www.majr.com under "connector gaskets". Custom sizes can also be made upon request.

EMI/RFI Mounting Flange Gaskets for Connectors — Table 1

Shell Size	MIL-DTL-38999 SERIES				MIL P/N: M83528/004X-[]	Dimensions					Part Numbers		
	I	II	III	IV		A	B	C	D	E	MULTICON (Oriented wire in silicone) P/N:	RADTHIN (Elastomer impregnated wire) P/N:	CONDUCTIVE ELASTOMER & M83528/004X-[] P/N:
6					[001]	0.469	0.375	0.738	0.141	0.141	2047-60601-XX	2040-60601-XX	2050-60601-XX
8		√			[002]	0.594	0.630	0.840	0.135		2047-60802-XX	2040-60802-XX	2050-60802-XX
					[003]	0.594	0.568	0.812	0.125		2047-60803-XX	2040-60803-XX	2050-60803-XX
					[004]	0.594	0.500	0.875	0.156		2047-60804-XX	2040-60804-XX	2050-60804-XX
9	√				[005]	0.719	0.750	0.965	0.135		2047-60903-XX	2040-60903-XX	2050-60903-XX
			√			0.719	0.750	0.965	0.135	0.222	2047-60904-XX	2040-60904-XX	2050-60904-XX
10		√			[005]	0.719	0.750	0.965	0.135		2047-61003-XX	2040-61003-XX	2050-61003-XX
					[006]	0.719	0.680	0.937	0.125		2047-61004-XX	2040-61004-XX	2050-61004-XX
					[007]	0.719	0.625	1.000	0.156		2047-61005-XX	2040-61005-XX	2050-61005-XX
11	√			√	[008]	0.812	0.875	1.060	0.141		2047-61101-XX	2040-61101-XX	2050-61101-XX
			√			0.812	0.875	1.060	0.141	0.206	2047-61103-XX	2040-61103-XX	2050-61103-XX
12		√			[008]	0.812	0.875	1.060	0.141		2047-61202-XX	2040-61202-XX	2050-61202-XX
					[009]	0.813	0.750	1.094	0.156		2047-61203-XX	2040-61203-XX	2050-61203-XX
13	√			√	[010]	0.906	1.005	1.153	0.135		2047-61305-XX	2040-61305-XX	2050-61305-XX
			√			0.906	1.000	1.156	0.141	0.206	2047-61306-XX	2040-61306-XX	2050-61306-XX
14		√			[010]	0.906	1.005	1.153	0.135		2047-61401-XX	2040-61401-XX	2050-61401-XX
					[011]	0.906	0.938	1.125	0.125		2047-61402-XX	2040-61402-XX	2050-61402-XX
					[012]	0.906	0.875	1.188	0.156		2047-61403-XX	2040-61403-XX	2050-61403-XX
15	√			√	[013]	0.969	1.135	1.258	0.156		2047-61501-XX	2040-61501-XX	2050-61501-XX
			√			0.969	1.135	1.258	0.156	0.206	2047-61503-XX	2040-61503-XX	2050-61503-XX
16		√			[013]	0.969	1.135	1.258	0.156		2047-61602-XX	2040-61602-XX	2050-61602-XX
					[014]	0.969	1.063	1.250	0.125		2047-61603-XX	2040-61603-XX	2050-61603-XX
					[015]	0.969	1.000	1.281	0.156		2047-60604-XX	2040-60604-XX	2050-60604-XX
17	√			√	[016]	1.062	1.260	1.351	0.156		2047-61701-XX	2040-61701-XX	2050-61701-XX
			√			1.062	1.260	1.351	0.156	0.222	2047-61703-XX	2040-61703-XX	2050-61703-XX
18		√			[016]	1.062	1.260	1.351	0.156		2047-61801-XX	2040-61801-XX	2050-61801-XX
					[017]	1.062	1.189	1.343	0.125		2047-61802-XX	2040-61802-XX	2050-61802-XX
					[018]	1.062	1.135	1.375	0.156		2047-61803-XX	2040-61803-XX	2050-61803-XX
19	√			√	[019]	1.156	1.375	1.500	0.141		2047-61901-XX	2040-61901-XX	2050-61901-XX
			√			1.156	1.375	1.500	0.141	0.206	2047-61903-XX	2040-61903-XX	2050-61903-XX
20		√			[019]	1.156	1.375	1.500	0.141		2047-62002-XX	2040-62002-XX	2050-62002-XX
					[020]	1.156	1.312	1.467	0.125		2047-62003-XX	2040-62003-XX	2050-62003-XX
					[021]	1.156	1.250	1.500	0.172		2047-62004-XX	2040-62004-XX	2050-62004-XX
21	√			√	[022]	1.250	1.500	1.625	0.141		2047-62101-XX	2040-62101-XX	2050-62101-XX
			√			1.250	1.500	1.625	0.141	0.206	2047-62103-XX	2040-62103-XX	2050-62103-XX
22		√			[022]	1.250	1.500	1.625	0.141		2047-62202-XX	2040-62202-XX	2050-62202-XX
					[023]	1.250	1.437	1.562	0.125		2047-62203-XX	2040-62203-XX	2050-62203-XX
					[024]	1.250	1.375	1.625	0.172		2047-62201-XX	2040-62201-XX	2050-62201-XX
23	√			√	[025]	1.375	1.625	1.750	0.172		2047-62301-XX	2040-62301-XX	2050-62301-XX
			√			1.375	1.625	1.750	0.172	0.259	2047-62303-XX	2040-62303-XX	2050-62303-XX
24		√			[025]	1.375	1.625	1.750	0.172		2047-62402-XX	2040-62402-XX	2050-62402-XX
					[026]	1.375	1.563	1.703	0.152		2047-62403-XX	2040-62403-XX	2050-62403-XX
					[027]	1.375	1.500	1.750	0.203		2047-62401-XX	2040-62401-XX	2050-62401-XX
25	√			√	[028]	1.500	1.750	1.875	0.172		2047-62502-XX	2040-62502-XX	2050-62502-XX
			√			1.500	1.750	1.875	0.172	0.259	2047-62503-XX	2040-62503-XX	2050-62503-XX
28					[029]	1.562	1.750	2.000	0.203		2047-62801-XX	2040-62801-XX	2050-62801-XX
29						1.568	2.000	2.171	0.172	0.195	2047-62901-XX	2040-62901-XX	2050-62901-XX
32					[030]	1.750	2.000	2.250	0.219		2047-63201-XX	2040-63201-XX	2050-63201-XX
33						1.734	2.187	2.356	0.203	0.234	2047-63301-XX	2040-63301-XX	2050-63301-XX
36					[031]	1.938	2.250	2.500	0.219		2047-63601-XX	2040-63601-XX	2050-63601-XX
40					[032]	2.188	2.500	2.750	0.219		2047-64001-XX	2040-64001-XX	2050-64001-XX
44					[033]	2.375	2.781	3.000	0.219		2047-64401-XX	2040-64401-XX	2050-64401-XX
48					[034]	2.625	3.031	3.250	0.219		2047-64801-XX	2040-64801-XX	2050-64801-XX

Replace-X with:
 -A Ag/Cu sil
 -B Ag/Al sil
 -D Ag/Al fluoro
 -E Ag sil
 -F Ag fluoro
 -L Ag/Ni sil
 -more available

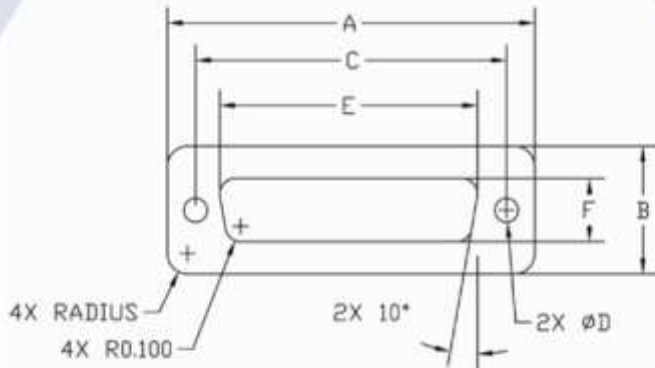
Custom sizes can be made to your specifications.

Replace -XX with:
 -03 sil solid w/monel
 -04 sil sponge w/monel
 -07 sil solid w/alum
 -08 sil sponge w/alum

Replace -XX with:
 -05 neo solid w/alum
 -07 sil solid w/alum

Replace -XX with:
 -62 Ag/Cu type A
 -63 Ag/Al type B
 -64 Ag/Al fluoro type D
 -65 Ag/Ni type L
 -66 Ag type E
 -68 Ag/Cu type K
 -more material available

D-Subminiature Gaskets for Connectors — Figure 2



D-Subminiature Gaskets for Connectors — Table 2

Shell Size	Dimensions						Part Numbers		
							MULTICON (Oriented wire in silicone) P/N:	RADTHIN (Elastomer impregnated wire) P/N:	CONDUCTIVE ELASTOMER P/N:
	A	B	C	D	E	F			
9 PIN	1.213	0.594	0.984	0.120	0.697	0.360	2047-19334-XX	2040-19334-XX	2050-19334-XX
15 PIN	1.556	0.600	1.312	0.130	1.080	0.370	2047-19335-XX	2040-19335-XX	2050-19335-XX
25 PIN	2.087	0.594	1.852	0.120	1.583	0.378	2047-19336-XX	2040-19336-XX	2050-19336-XX
37 PIN	2.729	0.594	2.500	0.120	2.231	0.378	2047-19337-XX	2040-19337-XX	2050-19337-XX
50 PIN	2.635	0.605	2.406	0.120	2.109	0.466	2047-19338-XX	2040-19338-XX	2050-19338-XX
Custom sizes can be made to your specifications.							Replace -XX with: -03 sil solid w/monel -04 sil sponge w/monel -07 sil solid w/alum -08 sil sponge w/alum	Replace -XX with: -05 neo solid w/alum -07 sil solid w/alum	Replace -XX with: -62 Ag/Cu type A -63 Ag/Al type B -64 Ag/Al fluoro type D -65 Ag/Ni type L -66 Ag type E -68 Ag/Cu type K -more material available

Materials Selection

Connector gaskets can be supplied in a variety of materials both non-conductive and conductive. A wide variety of materials are available to meet customer temperature ranges, conductivity, durometer and thickness of material to fill the void in the application

Connector Gasket Material Selection — Table 3

Material Designation	Shield Material	Elastomer Material	Mil-DTL-83528 Type
-03 Multicon	Monel Inbedded	Silicone	--
-04 Multicon	Monel Inbedded	Silicone Sponge	--
-05 Radthin	Aluminum	Neoprene	--
-07 Radthin or Multicon	Aluminum	Silicone	--
-08 Multicon	Aluminum	Silicone Sponge	--
-52 Ni/G Conductive Elastomer	Nickel/Graphite	Silicone	--
-61 Ag/Glass Conductive Elastomer	Silver/Glass	Silicone	M
-62 Ag/Cu Conductive Elastomer (65 duro)	Silver/Copper	Silicone	A
-63 Ag/Al Conductive Elastomer	Silver/Aluminum	Silicone	B
-64 Ag/Al Conductive Elastomer	Silver/Aluminum	Fluorosilicone	D
-65 Ag/Ni Conductive Elastomer	Silver/Nickel	Silicone	L
-66 Ag Conductive Elastomer	Silver	Silicone	E
-68 Ag/Cu Conductive Elastomer (85 duro)	Silver/Copper	Silicone	K
-69 Ag Conductive Elastomer	Silver	Fluorosilicone	F
-74 Ag/Cu Conductive Elastomer	Silver/Copper	Fluorosilicone	C
-76 Ag Conductive Elastomer	Silver	Silicone	I
-78 Ag Conductive Elastomer (80 duro)	Silver	Silicone	H
-79 Ag/Cu Conductive Elastomer (80 duro)	Silver/Copper	Silicone	G