

# EMI/RFI Gaskets for Connectors (2000 Series)



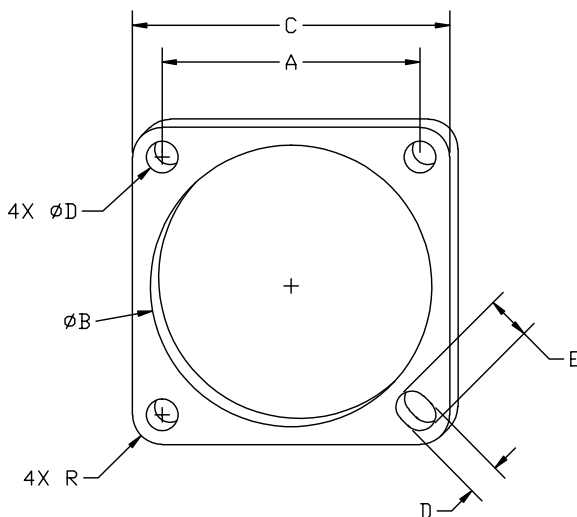
## Product Summary

Grounding of 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 the following connector gaskets.

MAJR Products offers a variety of gasket styles including MIL-DTL 38999, M83258, MIL-DTL 5015, and D-Subminiature. We provide QPL qualified gaskets as well as commercial grade products to accommodate both the military and consumer electronics industries.

## Design Data - Dimensional Characteristics

### 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](http://www.majr.com) under "connector gaskets". Custom sizes can also be made upon request.

## Features

- **Material Choice:** Connector gaskets materials can be selected to meet environmental and mechanical requirements of the package to be shielded.
- **Standardization:** Die-cut connector gaskets are available for standard type connectors.
- **Low Cost:** MAJR's connector gaskets offer optimum RF grounding of connectors at minimal cost.
- **EMI Shield and Moisture Seal:** The elastomer embedded product both an EMI shield and moisture seal in a minimum thickness, thus not requiring extended protrusion from surface of enclosures.

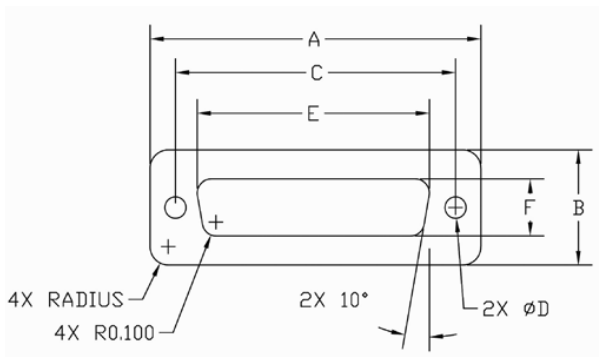
EMI/RFI Mounting Flange Gaskets for Connectors — Table 1

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

EMI/RFI Gaskets for Connectors (2000 Series)



## 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 Conduitive 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