EAST COAST SHIELDING
Bonded O-Rings

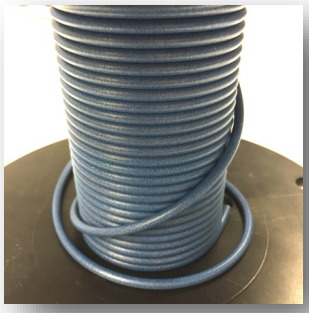
Advantages of Spliced O-Rings:

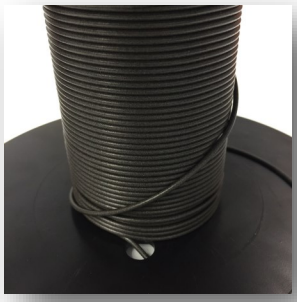
- O-rings or Seals can be made from a range of compounds
(ECS3 Series Conductive Silicone & ECS300 Series Non-Conductive Silicone)
- No Tooling required for standard ID/OD O-Rings Cord
- O-rings can be made in virtually any diameter and length
- Shorter lead times and faster delivery than molded rings

O-Ring Cord Cut Length Calculator:

Calculated O-ring Cord Cut Length: ((OD+ID)/2) x Pi = length

(Pi = 3.1416), ID = OD - (2 x C/S)





O-Ring Materials

An O-ring is only as good as the material it is crafted from. East Coast Shielding makes certain that we have a huge selection of top quality materials to choose from:

- Silicone (ECS300 Series)
- Fluorosilicone
- Conductive elastomers (ECS3 Series & M83528/001, /002, /005, /011) .040" - .250" Cross Section
- Silicone sponge elastomers (ECS300 Series)

Our massive selection of materials guarantees that we can make an O-ring that is right for you no matter what the application. Please ask us about custom material.

EAST COAST SHIELDING

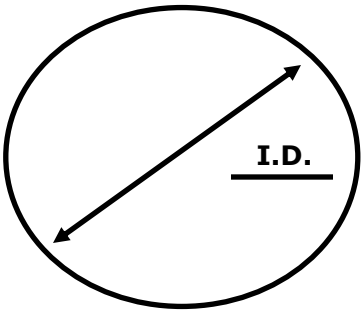
Bonded O-Rings : Military type per M83528/001, /002, /003, /005—/011

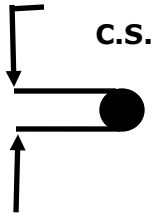
Available in

ECS 1000 / 2000	5000	5000 F	6000	8000	8000F
	Type: B	Type D	Type M	Type A & K	Type C

P/N example ECS3 - XXXX – XXXX Specification in table below

ECS Series	ECS Pt #	Material	
M83528	002/005 (size)	B (material)	001 (size)





Part #	C.S.	I.D.	M83528/002	M83528/005
ECS3-200-XXXX	.030	.442		005/001
ECS3-201-XXXX	.030	.577		005/002
ECS3-202-XXXX	.030	.692		005/003
ECS3-203-XXXX	.030	.817		005/004
ECS3-204-XXXX	.039	.425		005/005
ECS3-205-XXXX	.048	.295		005/006
ECS3-206-XXXX	.050	.533		005/007

EAST COAST SHIELDING

Bonded O-Rings : M83528/002 - M83528/005

Part #	C.S.	I.D.	M83528/002	M83528/005
ECS3-207-XXXX	.051	.446	-	005/008
ECS3-208-XXXX	.057	.415	-	005/009
ECS3-209-XXXX	.063	.541	-	005/010
ECS3-210-XXXX	.063	.648	-	005/011
ECS3-211-XXXX	.068	.847	-	005/012
ECS3-212-XXXX	.068	1.182	-	005/013
ECS3-213-XXXX	.068	6.165	-	005/014
ECS3-214-XXXX	.070	.145	002/007	-
ECS3-215-XXXX	.070	.301	002/011	-
ECS3-216-XXXX	.070	.364	002/012	-
ECS3-217-XXXX	.070	.426	002/013	-
ECS3-218-XXXX	.070	.489	002/014	-
ECS3-219-XXXX	.070	.495	-	005/015
ECS3-220-XXXX	.070	.551	002/015	-
ECS3-221-XXXX	.070	.610	-	005/016
ECS3-222-XXXX	.070	.635	-	005/017
ECS3-223-XXXX	.070	.667	-	005/018
ECS3-224-XXXX	.070	.676	002/017	-
ECS3-225-XXXX	.070	.739	002/018	-
ECS3-226-XXXX	.070	.801	002/019	-
ECS3-227-XXXX	.070	.860	-	005/019
ECS3-228-XXXX	.070	.864	002/020	-
ECS3-229-XXXX	.070	.926	002/021	-
ECS3-230-XXXX	.070	.989	002/022	-
ECS3-231-XXXX	.070	1.114	002/024	-
ECS3-232-XXXX	.070	1.176	002/025	-
ECS3-233-XXXX	.070	1.230	-	005/020
ECS3-234-XXXX	.070	1.239	002/026	-
ECS3-235-XXXX	.070	1.364	002/028	-
ECS3-236-XXXX	.070	1.614	002/030	-
ECS3-237-XXXX	.070	1.864	002/032	-
ECS3-238-XXXX	.070	3.489	002/043	-
ECS3-239-XXXX	.103	.612	002/114	-
ECS3-240-XXXX	.103	.676	002/115	-

EAST COAST SHIELDING

Bonded O-Rings : M83528/002 - M83528/005 - M83528/013

Part #	C.S.	I.D.	M83528/002	M83528/005	M83528/013
ECS3-241-XXXX	.103	.799	002 / 017	-	-
ECS3-242-XXXX	.103	1.362	002 / 126	-	-
ECS3-243-XXXX	.103	1.487	002 / 128	-	-
ECS3-244-XXXX	.103	1.612	-	005 / 022	-
ECS3-245-XXXX	.103	1.737	002 / 132	-	-
ECS3-246-XXXX	.103	1.790	-	005 / 023	-
ECS3-247-XXXX	.103	1.862	002 / 134	-	-
ECS3-248-XXXX	.103	2.362	002 / 142	-	-
ECS3-249-XXXX	.103	2.550	002 / 145	-	-
ECS3-250-XXXX	.103	3.987	002 / 155	-	-
ECS3-251-XXXX	.115	2.683	-	-	013 / 029
ECS3-252-XXXX	.139	2.011	-	-	013 / 022

EAST COAST SHIELDING

Bonded O-Rings : M83528/002 - M83528/005

*** Material table below ***

	Carbon 1000	**Nickel Graphite 2000**	**Nickel Graphite 2000F**	**Silver Aluminum 5000***	**Silver Aluminum 5000F***	**Silver Glass 6000**	**Silver Copper 8000***
Elastomer	Silicone	Silicone	Fluoro-silicone	Silicone	Fluoro-silicone	Silicone	Silicone
Color	Black	Dark Gray	Dark Gray	Blue*	Blue*	Tan	Tan
Specific Gravity, gm/cc	1.2	1.95	1.95	2.0	2.0	1.9	3.5
Durometer Shore A	70	30-70	65	65	70	65	65
Volume Resistivity, Ohm-cm	7.0	0.10	0.10	0.008	0.012	0.006	0.004
Operating Temperature: Min C	-55°	-55°	-55°	-55°	-55°	-55°	-55°
Operating Temperature: Max C	200°	150°	150°	160°	160°	160°	125°
Compression Deflection % Min.	3.5	3.5	3.0	3.5	3.5	3.5	3.5
Tensile Strength, P.S.I.	650	150	150	200	180	200	200
Elongation % Min.	100%	100%	100%	100%	60%	100%	100%
Elongation % Max.	-	-	-	300%	260%	300%	300%
Compression Set %	40	35	25	32	30	30	32
Tear Strength lb./in.	40	40	35	30	35	30	25
Shielding Effectiveness (100 Mhz)	80	100	100	120	120	100	120
Shielding Effectiveness (500 Mhz)	80	100	100	120	120	100	120
Shielding Effectiveness (2 Ghz)	60	100	100	115	115	90	120
Shielding Effectiveness (10 Ghz)	50	100	100	115	115	90	120

* See next page for actual data (MIL-DTL-83528H Qualifying results for types A, B, D, & K) *

EAST COAST SHIELDING

Qualifying Data for Types A, B, D, & K

	Silver Aluminum 5000-65 (Type B)	Silver Aluminum 5000F-70 (Type D)	Silver Copper 8000-65 (Type A)	Silver Copper 8000-85 (Type K)
Elastomer	Silicone	Fluorosilicone	Silicone	Silicone
Color	Blue	Blue	Tan	Tan
Specific Gravity, g/cc	2.0689	2.1998	3.5976	3.6612
Durometer, Shore A	67.66	70	71.33	81.33
Volume Resistivity, ohm-cm	.00278	.00326	.00107	.00127
Compression Deflection, %	16.66	13.217	12.793	12.793
Tensile Strength, PSI	278.108	330.137	353.004	602.853
Elongation, %	222.282	190.895	254.002	265.042
Compression Set, %	12.74	21.08	25.1533	25.6933
Tear Strength, lb./in.	53.192	66.972	54.837	81.169
Electrical Stability After Break, ohm-cm	.00295	.0072	.00097	.00186
Vibration, Ohm-cm During/After	.00719/.00126	.00213/.00089	.00279/.000413	.00145/.00045
Low Temp. Flex, °C TR10/TR70	-70 °C/-65 °C	-67.6 °C/-61.33 °C	-69 °C/-69 °C	-69.8 °C/-69.8 °C
Life Testing, Ohm-cm	.0046	.00632	.00548	.00616
EMP, Ohm-cm	.0083	.0103	.0053	.005
Fluid Immersion, Survivability	Not Survivable	Survivable	Not Survivable	Not Survivable
Shielding Effectiveness, 100 MHz	125	119	125	127
Shielding Effectiveness, 500 MHz	120	121	131	134
Shielding Effectiveness, 2 GHz	123	123	120	132
Shielding Effectiveness, 10 GHz	122	121	126	128