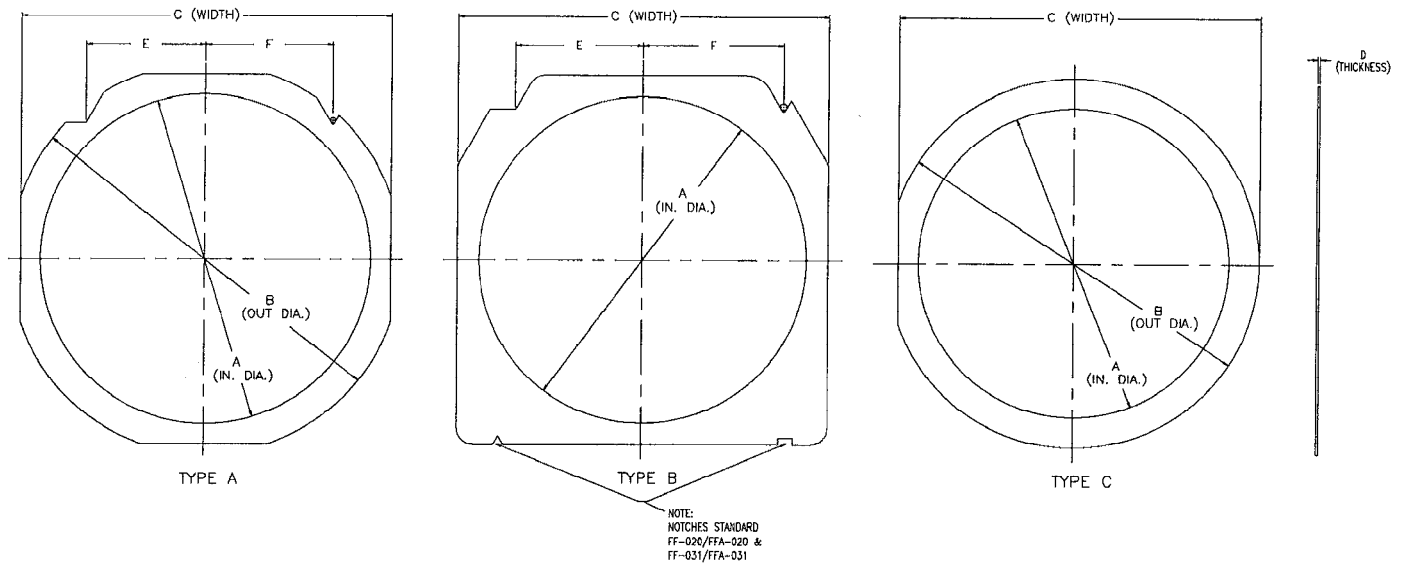
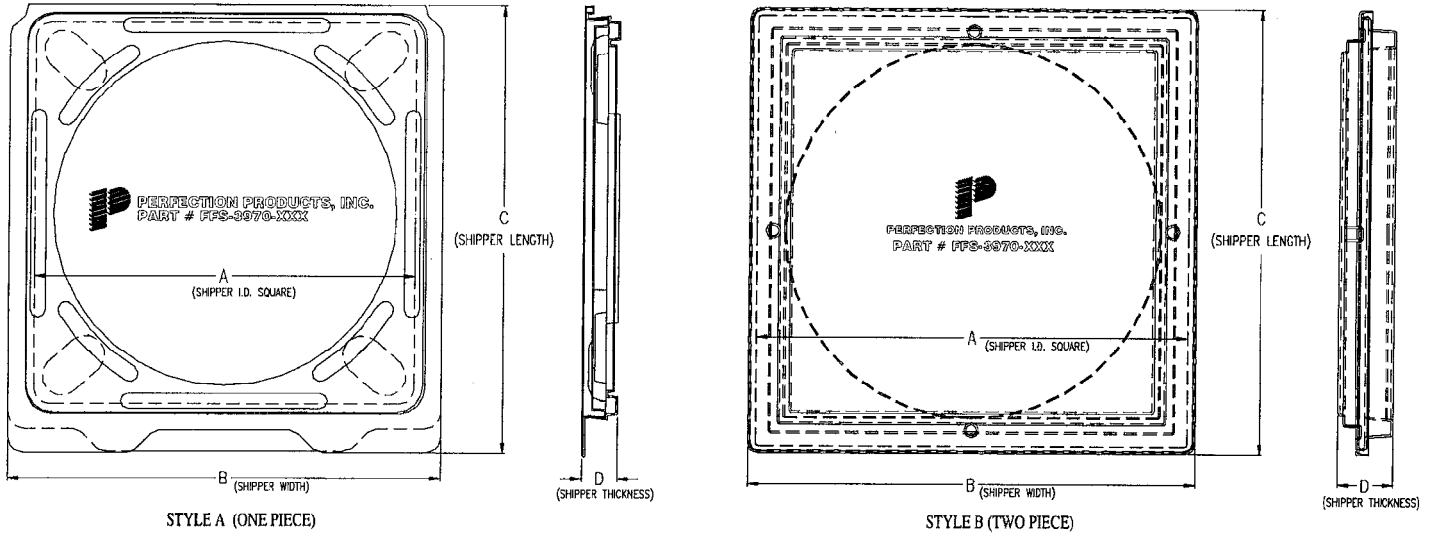


## Perfection Film Frame (Stainless & Aluminum)



Wafer Dia.	Frame Type	Inside Diameter (A)	Outside Diameter (B)	Width (C)	Thickness (D)	Pin Loc. (E)	Pin Loc. (F)	Frame Style	Weight (lbs) (stainless)	Film Frame Part Number	
										Stainless	Aluminum
3.0" 75 mm	Type B	4.750"	-	6.000"	0.020"	2.375"	2.500"	FF-104-20	.12	FF-015	FFA-015
4.0" 100 mm	Type B	5.130"	-	6.000"	0.030"	2.375"	2.500"	FF-104-30	.14	FF-020	FFA-020
	Type B	5.850"	-	6.620"	0.030"	2.280"	2.500"	FF-105-30	.14	FF-031	FFA-031
	Type B	5.750"	-	6.620"	0.030"	2.280"	2.500"	350-075	.15	FF-033	FFA-033
5.0" 125 mm	Type B	6.500"	-	7.250"	0.040"	2.375"	2.500"	FF-105-40	.17	FF-040	FFA-040
	Type A	6.500"	7.750"	7.250"	0.040"	2.380"	2.500"	350-102	.14	FF-045	FFA-045
	Type C	6.430"	7.677"	7.480"	0.040"	-	-	DTF-2-5	.15	FF-050	-
6.0" 150 mm	Type A	6.890"	8.425"	7.677"	0.040"	2.370"	2.500"	DTF-2-6	.17	FF-055	FFA-055
	Type A	7.638"	8.976"	8.346"	0.040"	2.370"	2.500"	DTF-2-6-1	.17	FF-065	FFA-065
	Type A	7.638"	8.976"	8.346"	0.048"	2.370"	2.500"	DTF-2-6-1	.21	FF-070	FFA-070
	Type A	7.244"	8.976"	8.500"	0.040"	2.756"	2.912"	350-3	.22	FF-075	-
	Type A	7.580"	8.980"	8.500"	0.048"	2.756"	2.912"	350-103	.23	FF-080	FFA-080
	Type A	7.580"	8.980"	8.500"	0.060"	2.756"	2.912"	350-103	.28	FF-090	-
8.0" 200 mm	Type A	9.540"	11.080"	10.500"	0.060"	3.460"	3.560"	350-104	.36	FF-105	FFA-105
	Type A	9.842"	11.653"	10.866"	0.048"	2.919"	3.175"	DTF-2-8	.37	FF-107	FFA-107
	Type A	9.842"	11.653"	10.866"	0.048"	2.381"	2.500"	DTF-2-8-1	.37	FF-108	FFA-108
12.0" 300 mm	Type A	13.779"	15.748"	14.960"	0.060"	3.386"	3.543"	SEMI-G74	.71	FF-123	-
	Type A	13.779"	15.748"	14.960"	0.048"	3.386"	3.543"	SEMI-G74	.61	FF-125	-

## Perfection Film Frame Shipper



Film Frame Width	Inside Width (A)	Width (B)	Length (C)	Thk. (Ref.) (D)	Shipper Style	Material (Plastic)	Weight (lbs)	Perfection Film Frame Part #			Shipper Part #
								Stainless	Aluminum	Plastic	
6.000"	6.020"	8.28"	8.54"	.68"	A	Anti-Static	.20	FF-015 / FF-020	FFA-015 / FFA-020	-	FFS-3970-20
	6.020"	8.28"	8.54"	.68"	A	Conductive	.16	FF-015 / FF-020	FFA-015 / FFA-020	-	FFS-3970-20a
6.620"	6.640"	8.28"	8.54"	.68"	A	Anti-Static	.20	FF-031 / FF-033	FFA-031 / FFA-033	FFP-7290-13	FFS-3970-31
	6.640"	8.28"	8.54"	.68"	A	Conductive	.17	FF-031 / FF-033	FFA-031 / FFA-033	FFP-7290-13	FFS-3970-31a
7.250"	7.270"	8.28"	8.54"	.68"	A	Anti-Static	.19	FF-040 / FF-045	FFA-040 / FFA-045	-	FFS-3970-40/45
	7.290"	8.28"	8.54"	.68"	A	Conductive	.22	FF-040 / FF-045	FFA-040 / FFA-045	-	FFS-3970-45a
7.677"	7.700"	9.44"	9.82"	.68"	A	Anti-Static	.21	FF-055	FFA-055	-	FFS-3970-55
	7.700"	9.44"	9.82"	.68"	A	Conductive	.21	FF-055	FFA-055	-	FFS-3970-55a
8.346"	8.366"	9.44"	9.82"	.68"	A	Anti-Static	.27	FF-065 / FF-070	FFA-065 / FFA-070	FFP-7290-15	FFS-3970-70
	8.366"	9.44"	9.82"	.68"	A	Conductive	.21	FF-065 / FF-070	FFA-065 / FFA-070	FFP-7290-15	FFS-3970-70a
8.500"	8.520"	9.44"	9.82"	.68"	A	Anti-Static	.27	FF-075 / FF-080 FF-090	FFA-080	FFP-7290-12	FFS-3970-80
	8.550"	8.95"	8.95"	1.40"	B	PETG	.48	FF-075 / FF-080 FF-090	FFA-080	FFP-7290-12	FFS-3970-80a
	8.550"	8.95"	8.95"	1.40"	B	Conductive	.48	FF-075 / FF-080 FF-090	FFA-080	FFP-7290-12	FFS-3970-80b
	8.520"	9.44"	9.82"	.68"	A	Conductive	.22	FF-075 / FF-080 FF-090	FFA-080	FFP-7290-12	FFS-3970-80c
10.500"	10.520"	12.24"	12.80"	.80"	A	Anti-Static	.59	FF-105	FFA-105	FFP-7290-14	FFS-3970-105
	10.830"	11.25"	11.25"	1.40"	B	PETG	.73	FF-105	FFA-105	FFP-7290-14	FFS-3970-105a
10.866"	10.890"	12.24"	12.80"	.80"	A	Anti-Static	.61	FF-107 / FF-108	FFA-107 / FFA-108	FFP-7290-11	FFS-3970-108
	10.890"	12.24"	12.80"	.80"	A	Conductive	.50	FF-107 / FF-108	FFA-107 / FFA-108	FFP-7290-11	FFS-3970-108a

**Key Features**

- Available in a wide range of standard film frame sizes
- Minimizes product handling and damage, improving efficiency and yield
- Transparent material allows for visual identification of contents (Anti-Static *ONLY*)
- Reusable packaging lowers cost and reduces waste

**Available Options**

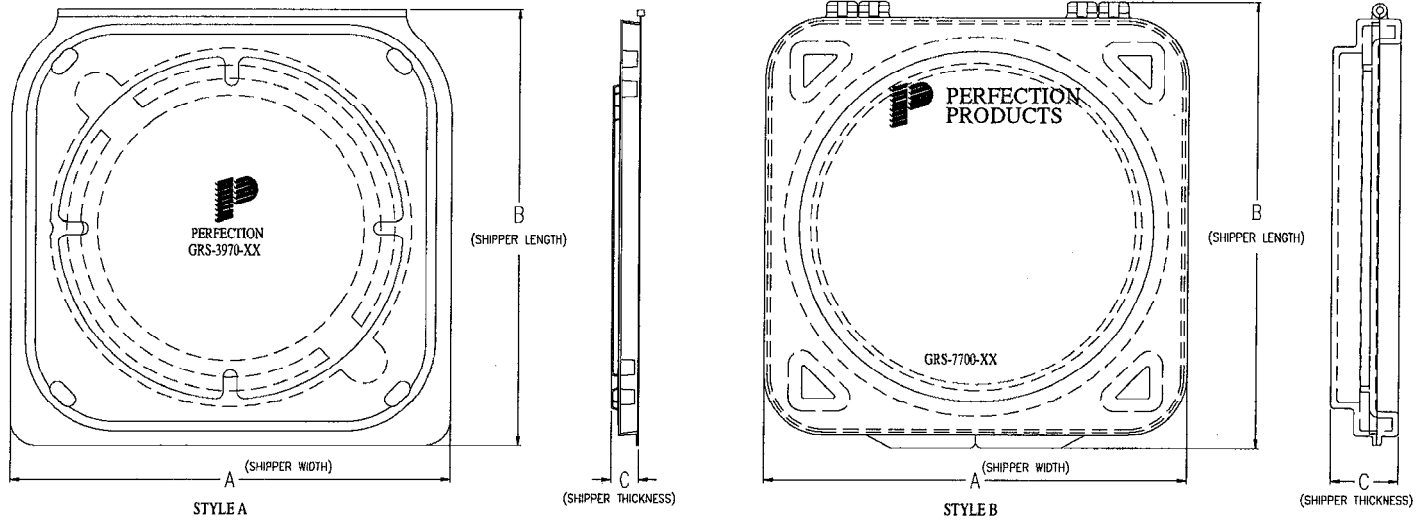
- Anti-Static (Clear) or Conductive (Solid Black)

**Other Available Items Used With Film Frame Shippers**

- Film Frames

❖ *Don't see what you need? We can manufacture a custom Film Frame Shipper to meet your specific requirements.*

**Perfection Grip / Expander Ring Shippers**



Grip Ring Assembly (ID / OD)	Width (A)	Length (B)	Thk. (Ref.) (C)	Shipper Style	Material	Weight (lbs)	Perfection Grip Ring Series #	Shipper Part #
4.530" / 4.990"	7.31"	7.25"	.50"	A	Anti-Static	.15	GRP-2620-3	GRS-3970-3-4
	7.31"	7.25"	.50"	A	Conductive	.15	GRP-2620-3	GRS-3970-3-4b
5.520" / 5.981"	7.31"	7.25"	.50"	A	Anti-Static	.15	GRP-2620-4	GRS-3970-3-4
	7.31"	7.25"	.50"	A	Conductive	.15	GRP-2620-4	GRS-3970-3-4b
	7.00"	7.37"	1.18"	B	Conductive	.65	GRP-2620-4	GRS-7700-4
6.689" / 7.322"	9.18"	9.56"	1.00"	A	Conductive	.22	GRP-2620-5	GRS-3970-5b
	9.31"	9.25"	.55"	A	Anti-Static	.33	GRP-2620-5	GRS-3970-5-6
	9.31"	9.25"	.55"	A	Conductive	.33	GRP-2620-5	GRS-3970-5-6b
7.670" / 8.280"	9.31"	9.25"	.55"	A	Anti-Static	.33	GRP-2620-6	GRS-3970-5-6
	9.31"	9.25"	.55"	A	Conductive	.33	GRP-2620-6	GRS-3970-5-6b

**Key Features**

- Available in a wide range of standard grip ring sizes
- Minimizes product handling and damage, improving efficiency and yield
- Transparent material allows for visual identification of contents (Anti-Static *ONLY*)
- Reusable packaging lowers cost and reduces waste

**Available Options**

- Anti-Static (Clear) or Conductive (Solid Black)

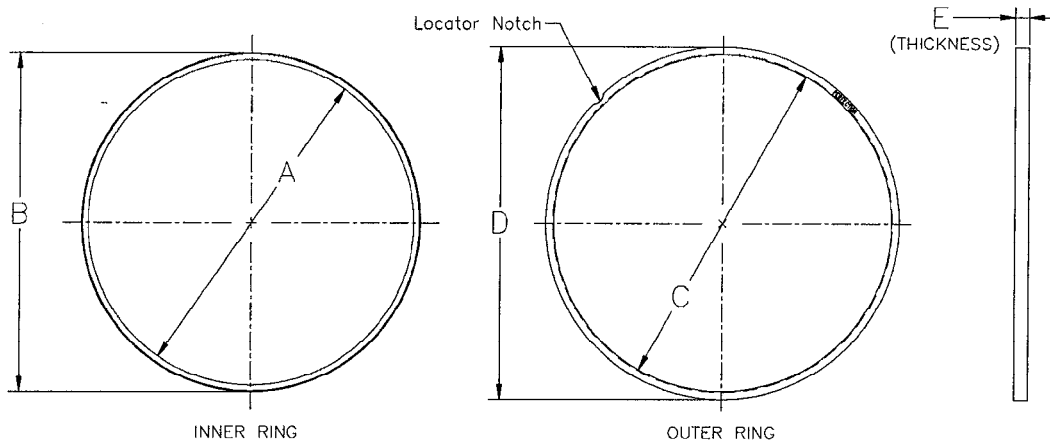
**Other Available Items Used With Grip Ring Shippers**

- Grip / Expander Rings

❖ *Don't see what you need? We can manufacture a custom Grip Ring Shipper to meet your specific requirements.*

**Perfection Grip / Expander Rings**

(Plastic)



Wafer Diameter	Inner Ring I.D. / O.D. (A / B)	Outer Ring I.D. / O.D. (C / D)	Ring Thickness (E)	Locator Notch	Ring Colors OD / ID	Weight (lbs)	Perfection Grip Ring Part Number
3.0" / 75 mm	4.530" / 4.768"	4.762" / 4.990"	.236"	Yes	Gray / Yellow	.04	GRP-2620-33
	4.530" / 4.768"	4.762" / 4.990"	.236"	Yes	Black / White	.04	GRP-2620-333
4.0" / 100 mm	5.520" / 5.750"	5.744" / 5.981"	.236"	No	Green / Yellow	.05	GRP-2620-4
	5.520" / 5.750"	5.744" / 5.981"	.236"	No	Blue / Red	.05	GRP-2620-4a
	5.520" / 5.750"	5.744" / 5.981"	.236"	No	Orange / Black	.05	GRP-2620-4b
	5.520" / 5.750"	5.744" / 5.981"	.236"	No	Blue / Gray	.05	GRP-2620-4c
	5.520" / 5.750"	5.744" / 5.981"	.236"	No	Green / Orange	.05	GRP-2620-4d
	5.520" / 5.750"	5.744" / 5.981"	.236"	No	Green / Yellow (marked UP)	.05	GRP-2620-4e
	5.520" / 5.750"	5.744" / 5.981"	.236"	No	Green / Red	.05	GRP-2620-4f
	5.520" / 5.750"	5.744" / 5.981"	.236"	Yes	Green / Yellow	.05	GRP-2620-44
	5.520" / 5.750"	5.744" / 5.981"	.236"	Yes	Blue / Red	.05	GRP-2620-44a
	5.520" / 5.750"	5.744" / 5.981"	.236"	Yes	Orange / Black	.05	GRP-2620-44b
	5.520" / 5.750"	5.744" / 5.981"	.236"	Yes	Blue / Gray	.05	GRP-2620-44c
	5.520" / 5.750"	5.744" / 5.981"	.236"	Yes	Green / Orange	.05	GRP-2620-44d
	5.520" / 5.750"	5.744" / 5.981"	.236"	Yes	Green / Yellow (marked UP)	.05	GRP-2620-44e
	5.520" / 5.750"	5.744" / 5.981"	.236"	Yes	Green / Red	.05	GRP-2620-44f
5.520" / 5.750"	5.744" / 5.981"	.236"	Yes	Black / White	.05	GRP-2620-444	
5.0" / 125 mm	6.689" / 7.010"	7.000" / 7.322"	.236"	No	Red / Yellow	.09	GRP-2620-5
	6.689" / 7.010"	7.000" / 7.322"	.236"	No	Blue / Gray	.09	GRP-2620-5a
	6.689" / 7.010"	7.000" / 7.322"	.236"	No	Red / Yellow	.09	GRP-2620-5b
	6.689" / 7.010"	7.000" / 7.322"	.236"	No	Natural / Natural	.09	GRP-2620-5c
	6.689" / 7.010"	7.000" / 7.322"	.236"	No	Green / Orange	.09	GRP-2620-5d
	6.689" / 7.010"	7.000" / 7.322"	.236"	Yes	Red / Yellow	.09	GRP-2620-55
	6.689" / 7.010"	7.000" / 7.322"	.236"	Yes	Blue / Gray (marked UP)	.09	GRP-2620-55a
	6.689" / 7.010"	7.000" / 7.322"	.236"	Yes	Red / Yellow (marked RADIUS)	.09	GRP-2620-55b
	6.689" / 7.010"	7.000" / 7.322"	.236"	Yes	Natural / Natural	.09	GRP-2620-55c
	6.689" / 7.010"	7.000" / 7.322"	.236"	Yes	Green / Orange	.09	GRP-2620-55d
	6.689" / 7.010"	7.000" / 7.322"	.236"	Yes	Black / White	.09	GRP-2620-555
6.0" / 150 mm	7.670" / 7.973"	7.975" / 8.280"	.236"	No	Blue / Yellow	.09	GRP-2620-6
	7.670" / 7.973"	7.975" / 8.280"	.236"	No	Blue / Yellow (marked RADIUS)	.09	GRP-2620-6a
	7.670" / 7.973"	7.975" / 8.280"	.236"	Yes	Blue / Yellow	.09	GRP-2620-66
	7.670" / 7.973"	7.975" / 8.280"	.236"	Yes	Blue / Yellow (marked RADIUS)	.09	GRP-2620-66a
	7.670" / 7.973"	7.975" / 8.280"	.236"	Yes	Black / White	.09	GRP-2620-666
8.0" / 200 mm	8.856" / 9.176"	9.178" / 9.498"	.236"	No	Orange / Yellow	.108	GRP-2620-8
	8.856" / 9.176"	9.178" / 9.498"	.236"	Yes	Orange / Yellow	.108	GRP-2620-88

**Available Options Other Available Items Used With Grip / Expander Rings**

- Colors (Aluminum & Plastic)
- Engraving (Aluminum ONLY)
- Pad Printing (Plastic ONLY)
- Film Frames
- Grip Ring Magazines
- Grip Ring Shippers

❖ Don't see what you need? We can manufacture a custom ring in Aluminum or Plastic to your specific requirements