

AS85049/10 and MS3437A Straight EMI/RFI Environmental Backshell



AS85049

B

CONNECTOR DESIGNATOR:	
A	AS50151 Series AS34001
	MIL-DTL-26482 Series II
	AS81703 Series III
	MIL-DTL-83723 Series I & III
	40M39569, DEF 5326-3, EN 2997
	EN 3646, ESC 10, ESC 11, LN 29504
	NFC93422 Series HE302
	PAN 6432-1, PAN 6432-2, PATT 602



Finish / Material
B = Black Cadmium / Stainless Steel
N = Electroless Nickel / Aluminum
S = Passivated / Stainless Steel
W = 1,000 Hr. Cadmium Olive Drab over Electroless Nickel / Aluminum
X = Aluminum, Nickel Fluorocarbon Polymer
Z = Aluminum, Zinc-Nickel, Black
XS = Stainless Steel, Nickel Fluorocarbon Polymer
ZS = Stainless Steel, Zinc-Nickel, Black



Shell Size	A Thread Class 2B	C Dia Max
3	.562 - 24 UNEF	.67 (17.0)
8	.500 - 20 UNF	.62 (15.7)
10	.625 - 24 UNEF	.73 (18.5)
12	.750 - 20 UNEF	.86 (21.8)
14	.875 - 20 UNEF	.98 (24.9)
16	1.000 - 20 UNEF	1.11 (28.2)
18	1.062 - 18 UNEF	1.22 (31.0)
20	1.188 - 18 UNEF	1.34 (34.0)
22	1.313 - 18 UNEF	1.47 (37.3)
24	1.438 - 18 UNEF	1.59 (40.4)
28	1.750 - 18 UNS	1.97 (50.0)
32	2.000 - 18 UNS	2.22 (56.4)
36	2.250 - 16 UN	2.47 (62.7)
40	2.500 - 16 UN	2.72 (69.1)
44	2.750 - 16 UN	2.97 (75.4)
48	3.000 - 16 UN	3.22 (81.8)
61	1.500 - 18 UNEF	1.65 (41.9)

- | APPLICATION NOTES |
|---|
| 1. For complete dimensions see the applicable Military Specification. |
| 2. Metric dimensions (mm) are in parentheses. |
| 3. Cable Range is defined as the accommodation range for the wire bundle or cable. Dimensions shown are not intended for inspection criteria. |

Dimensions in inches (millimeters) and are subject to change without notice.



AS85049/10 and MS3437A Straight EMI/RFI Environmental Backshell

TABLE II: Dash No., Style, Shell Size, Dimensions and Cable Range

Dash No.	Shell Size	Style	E		K		L		Cable Range		M85049/42 Ref.
			Max		Ref		Max		Min	Max	
01	3	1	2.125 (54.0)		1.544 (39.2)		.957 (24.3)		.125 (3.2)	.250 (6.4)	4
02	3	1	3.125 (79.4)		1.544 (39.2)		.957 (24.3)		.125 (3.2)	.250 (6.4)	4
03	3	2	2.875 (73.0)		1.544 (39.2)		1.145 (29.1)		.250 (6.4)	.437 (11.1)	6
04	3	2	3.875 (98.4)		1.544 (39.2)		1.145 (29.1)		.250 (6.4)	.437 (11.1)	6
05	8	1	2.125 (54.0)		1.544 (39.2)		.957 (24.3)		.125 (3.2)	.250 (6.4)	4
06	8	1	3.125 (79.4)		1.544 (39.2)		.957 (24.3)		.125 (3.2)	.250 (6.4)	4
07	8	2	2.875 (73.0)		1.544 (39.2)		1.145 (29.1)		.250 (6.4)	.437 (11.1)	6
08	8	2	3.875 (98.4)		1.544 (39.2)		1.145 (29.1)		.250 (6.4)	.437 (11.1)	6
09	10	1	2.125 (54.0)		1.544 (39.2)		.957 (24.3)		.125 (3.2)	.312 (7.9)	4
10	10	1	3.125 (79.4)		1.544 (39.2)		.957 (24.3)		.125 (3.2)	.312 (7.9)	4
11	10	2	2.875 (73.0)		1.544 (39.2)		1.145 (29.1)		.250 (6.4)	.437 (11.1)	6
12	10	2	3.875 (98.4)		1.544 (39.2)		1.145 (29.1)		.250 (6.4)	.437 (11.1)	6
13	12	1	2.125 (54.0)		1.544 (39.2)		1.145 (29.1)		.250 (6.4)	.437 (11.1)	6
14	12	1	3.125 (79.4)		1.544 (39.2)		1.145 (29.1)		.250 (6.4)	.437 (11.1)	6
15	12	2	2.875 (73.0)		1.844 (46.8)		1.332 (33.8)		.350 (8.9)	.625 (15.9)	10
16	12	2	3.875 (98.4)		1.844 (46.8)		1.332 (33.8)		.350 (8.9)	.625 (15.9)	10
17	14	1	2.125 (54.0)		1.844 (46.8)		1.332 (33.8)		.350 (8.9)	.575 (14.6)	10
18	14	1	3.125 (79.4)		1.844 (46.8)		1.332 (33.8)		.350 (8.9)	.575 (14.6)	10
19	14	2	2.875 (73.0)		1.916 (48.7)		1.551 (39.4)		.500 (12.7)	.750 (19.1)	12
20	14	2	3.875 (98.4)		1.916 (48.7)		1.551 (39.4)		.500 (12.7)	.750 (19.1)	12
21	16	1	2.125 (54.0)		1.916 (48.7)		1.551 (39.4)		.500 (12.7)	.700 (17.8)	12
22	16	1	3.125 (79.4)		1.916 (48.7)		1.551 (39.4)		.500 (12.7)	.700 (17.8)	12
23	16	2	2.875 (73.0)		2.000 (50.8)		1.770 (45.0)		.625 (15.9)	.937 (23.8)	16
24	16	2	3.875 (98.4)		2.000 (50.8)		1.770 (45.0)		.625 (15.9)	.937 (23.8)	16
25	18	1	2.125 (54.0)		1.844 (46.8)		1.332 (33.8)		.350 (8.9)	.625 (15.9)	10
26	18	1	3.125 (79.4)		1.844 (46.8)		1.332 (33.8)		.350 (8.9)	.625 (15.9)	10
27	18	1	2.125 (54.0)		1.916 (48.7)		1.551 (39.4)		.500 (12.7)	.750 (19.1)	12
28	18	1	3.125 (79.4)		1.916 (48.7)		1.551 (39.4)		.500 (12.7)	.750 (19.1)	12
29	18	2	2.875 (73.0)		2.000 (50.8)		1.770 (45.0)		.625 (15.9)	.937 (23.8)	16
30	18	2	3.875 (98.4)		2.000 (50.8)		1.770 (45.0)		.625 (15.9)	.937 (23.8)	16
31	20	1	3.125 (79.4)		1.844 (46.8)		1.332 (33.8)		.350 (8.9)	.625 (15.9)	10
32	20	1	4.125 (104.8)		1.844 (46.8)		1.332 (33.8)		.350 (8.9)	.625 (15.9)	10
33	20	1	3.125 (79.4)		1.916 (48.7)		1.551 (39.4)		.500 (12.7)	.750 (19.1)	12
34	20	1	4.125 (104.8)		1.916 (48.7)		1.551 (39.4)		.500 (12.7)	.750 (19.1)	12
35	20	2	3.875 (98.4)		2.000 (50.8)		1.770 (45.0)		.625 (15.9)	.937 (23.8)	16
36	20	2	4.875 (123.8)		2.000 (50.8)		1.770 (45.0)		.625 (15.9)	.937 (23.8)	16
37	20	2	3.875 (98.4)		2.230 (56.6)		2.113 (53.7)		.875 (22.2)	1.250 (31.8)	20
38	20	2	4.875 (123.8)		2.230 (56.6)		2.113 (53.7)		.875 (22.2)	1.250 (31.8)	20
39	22	1	3.125 (79.4)		1.844 (46.8)		1.332 (33.8)		.350 (8.9)	.625 (15.9)	10
40	22	1	4.125 (104.8)		1.844 (46.8)		1.332 (33.8)		.350 (8.9)	.625 (15.9)	10
41	22	1	3.125 (79.4)		1.916 (48.7)		1.551 (39.4)		.500 (12.7)	.750 (19.1)	12
42	22	1	4.125 (104.8)		1.916 (48.7)		1.551 (39.4)		.500 (12.7)	.750 (19.1)	12
43	22	1	3.125 (79.4)		2.000 (50.8)		1.770 (45.0)		.625 (15.9)	.937 (23.8)	16
44	22	1	4.125 (104.8)		2.000 (50.8)		1.770 (45.0)		.625 (15.9)	.937 (23.8)	16
45	22	2	3.875 (98.4)		2.230 (56.6)		2.113 (53.7)		.875 (22.2)	1.250 (31.8)	20
46	22	2	4.875 (123.8)		2.230 (56.6)		2.113 (53.7)		.875 (22.2)	1.250 (31.8)	20
47	24	1	3.125 (79.4)		1.916 (48.7)		1.551 (39.4)		.500 (12.7)	.750 (19.1)	12
48	24	1	4.125 (104.8)		1.916 (48.7)		1.551 (39.4)		.500 (12.7)	.750 (19.1)	12
49	24	1	3.125 (79.4)		2.000 (50.8)		1.770 (45.0)		.625 (15.9)	.812 (20.6)	16
50	24	1	4.125 (104.8)		2.000 (50.8)		1.770 (45.0)		.625 (15.9)	.812 (20.6)	16
51	24	1	3.125 (79.4)		2.000 (50.8)		1.770 (45.0)		.625 (15.9)	.937 (23.8)	16
52	24	1	4.125 (104.8)		2.000 (50.8)		1.770 (45.0)		.625 (15.9)	.937 (23.8)	16

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Dimensions in inches (millimeters) and are subject to change without notice.

AS85049/10 and MS3437A Straight EMI/RFI Environmental Backshell



AS85049

B

TABLE II: (Continued from Page B-28)

Dash No.	Shell Size	Style	E Max	K Ref	L Max	Cable Range		M85049/42 Ref.
						Min	Max	
53	24	2	3.875 (98.4)	2.230 (56.6)	2.113 (53.7)	.875 (22.2)	1.250 (31.8)	20
54	24	2	4.875 (123.8)	2.230 (56.6)	2.113 (53.7)	.875 (22.2)	1.250 (31.8)	20
55	28	1	3.125 (79.4)	1.916 (48.7)	1.551 (39.4)	.500 (12.7)	.750 (19.1)	12
56	28	1	4.125 (104.8)	1.916 (48.7)	1.551 (39.4)	.500 (12.7)	.750 (19.1)	12
57	28	1	3.125 (79.4)	2.000 (50.8)	1.770 (45.0)	.625 (15.9)	.937 (23.8)	16
58	28	1	4.125 (104.8)	2.000 (50.8)	1.770 (45.0)	.625 (15.9)	.937 (23.8)	16
59	28	1	3.125 (79.4)	2.230 (56.6)	2.113 (53.7)	.875 (22.2)	1.250 (31.8)	20
60	28	1	4.125 (104.8)	2.230 (56.6)	2.113 (53.7)	.875 (22.2)	1.250 (31.8)	20
61	28	1	3.125 (79.4)	2.024 (51.4)	2.363 (60.0)	1.000 (25.4)	1.375 (34.9)	24
62	28	1	4.126 (104.8)	2.024 (51.4)	2.363 (60.0)	1.000 (25.4)	1.375 (34.9)	24
63	32	1	3.125 (79.4)	2.000 (50.8)	1.770 (45.0)	.625 (15.9)	.937 (23.8)	16
64	32	1	4.125 (104.8)	2.000 (50.8)	1.770 (45.0)	.625 (15.9)	.937 (23.8)	16
65	32	1	3.125 (79.4)	2.230 (56.6)	2.113 (53.7)	.875 (22.2)	1.250 (31.8)	20
66	32	1	4.125 (104.8)	2.230 (56.6)	2.113 (53.7)	.875 (22.2)	1.250 (31.8)	20
67	32	1	3.125 (79.4)	2.024 (51.4)	2.363 (60.0)	1.000 (25.4)	1.375 (34.9)	24
68	32	1	4.125 (104.8)	2.024 (51.4)	2.363 (60.0)	1.000 (25.4)	1.375 (34.9)	24
69	32	1	3.125 (79.4)	2.550 (64.8)	2.770 (70.4)	1.250 (31.8)	1.625 (41.3)	28
70	32	1	4.125 (104.8)	2.550 (64.8)	2.770 (70.4)	1.250 (31.8)	1.625 (41.3)	28
71	36	1	4.125 (104.8)	2.230 (56.6)	2.113 (53.7)	.875 (22.2)	1.250 (31.8)	20
72	36	1	5.125 (130.2)	2.230 (56.6)	2.113 (53.7)	.875 (22.2)	1.250 (31.8)	20
73	36	1	4.125 (104.8)	2.024 (51.4)	2.363 (60.0)	1.000 (25.4)	1.375 (34.9)	24
74	36	1	5.125 (130.2)	2.024 (51.4)	2.363 (60.0)	1.000 (25.4)	1.375 (34.9)	24
75	36	1	4.125 (104.8)	2.550 (64.8)	2.770 (70.4)	1.250 (31.8)	1.625 (41.3)	28
76	36	1	5.125 (130.2)	2.550 (64.8)	2.770 (70.4)	1.250 (31.8)	1.625 (41.3)	28
77	36	2	5.000 (127.0)	2.600 (66.0)	3.020 (76.7)	1.437 (36.5)	1.875 (47.6)	32
78	36	2	6.000 (152.4)	2.600 (66.0)	3.020 (76.7)	1.437 (36.5)	1.875 (47.6)	32
79	40	1	4.125 (104.8)	2.230 (56.6)	2.113 (53.7)	.875 (22.2)	1.250 (31.8)	20
80	40	1	5.125 (130.2)	2.230 (56.6)	2.113 (53.7)	.875 (22.2)	1.250 (31.8)	20
81	40	1	4.125 (104.8)	2.024 (51.4)	2.363 (60.0)	1.000 (25.4)	1.375 (34.9)	24
82	40	1	5.125 (130.2)	2.024 (51.4)	2.363 (60.0)	1.000 (25.4)	1.375 (34.9)	24
83	40	1	4.125 (104.8)	2.550 (64.8)	2.770 (70.4)	1.250 (31.8)	1.625 (41.3)	28
84	40	1	5.125 (130.2)	2.550 (64.8)	2.770 (70.4)	1.250 (31.8)	1.625 (41.3)	28
85	40	1	4.125 (104.8)	2.600 (66.0)	3.020 (76.7)	1.437 (36.5)	1.875 (47.6)	32
86	40	1	5.125 (130.2)	2.600 (66.0)	3.020 (76.7)	1.437 (36.5)	1.875 (47.6)	32
87	44	1	4.125 (104.8)	2.230 (56.6)	2.113 (53.7)	.875 (22.2)	1.250 (31.8)	20
88	44	1	5.125 (130.2)	2.230 (56.6)	2.113 (53.7)	.875 (22.2)	1.250 (31.8)	20
89	44	1	4.125 (104.8)	2.024 (51.4)	2.363 (60.0)	1.000 (25.4)	1.375 (34.9)	24
90	44	1	5.125 (130.2)	2.024 (51.4)	2.363 (60.0)	1.000 (25.4)	1.375 (34.9)	24
91	44	1	4.125 (104.8)	2.550 (64.8)	2.770 (70.4)	1.250 (31.8)	1.625 (41.3)	28
92	44	1	5.125 (130.2)	2.550 (64.8)	2.770 (70.4)	1.250 (31.8)	1.625 (41.3)	28
93	44	1	4.125 (104.8)	2.600 (66.0)	3.020 (76.7)	1.437 (36.5)	1.875 (47.6)	32
94	44	1	5.125 (130.2)	2.600 (66.0)	3.020 (76.7)	1.437 (36.5)	1.875 (47.6)	32
95	48	1	4.125 (104.8)	2.230 (56.6)	2.113 (53.7)	.875 (22.2)	1.250 (31.8)	20
96	48	1	5.125 (130.2)	2.230 (56.6)	2.113 (53.7)	.875 (22.2)	1.250 (31.8)	20
97	48	1	4.125 (104.8)	2.024 (51.4)	2.363 (60.0)	1.000 (25.4)	1.375 (34.9)	24
98	48	1	5.125 (130.2)	2.024 (51.4)	2.363 (60.0)	1.000 (25.4)	1.375 (34.9)	24
99	48	1	4.125 (104.8)	2.550 (64.8)	2.770 (70.4)	1.250 (31.8)	1.625 (41.3)	28
100	48	1	5.125 (130.2)	2.550 (64.8)	2.770 (70.4)	1.250 (31.8)	1.625 (41.3)	28
101	48	1	4.125 (104.8)	2.600 (66.0)	3.020 (76.7)	1.437 (36.5)	1.875 (47.6)	32
102	48	1	5.125 (130.2)	2.600 (66.0)	3.020 (76.7)	1.437 (36.5)	1.875 (47.6)	32
103	61	1	3.125 (79.4)	1.916 (48.7)	1.551 (39.4)	.500 (12.7)	.750 (19.1)	12
104	61	1	4.125 (104.8)	1.916 (48.7)	1.551 (39.4)	.500 (12.7)	.750 (19.1)	12

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Dimensions in inches (millimeters) and are subject to change without notice.



AS85049/10 and MS3437A Straight EMI/RFI Environmental Backshell

TABLE II: (Continued from Page B-29)

Dash No.	Shell Size	Style	E Max	K Ref	L Max	Cable Range		M85049/42 Ref.
						Min	Max	
105	61	1	3.125 (79.4)	2.000 (50.8)	1.770 (45.0)	.625 (15.9)	.937 (23.8)	16
106	61	1	4.125 (104.8)	2.000 (50.8)	1.770 (45.0)	.625 (15.9)	.937 (23.8)	16
107	61	2	3.875 (98.4)	2.230 (56.6)	2.113 (53.7)	.875 (22.2)	1.250 (31.8)	20
108	61	2	4.875 (123.8)	2.230 (56.6)	2.113 (53.7)	.875 (22.2)	1.250 (31.8)	20
109	61	2	3.875 (98.4)	2.024 (51.4)	2.363 (60.0)	1.000 (25.4)	1.375 (34.9)	24
110	61	2	4.875 (123.8)	2.024 (51.4)	2.363 (60.0)	1.000 (25.4)	1.375 (34.9)	24
111	12	1	2.125 (54.0)	1.844 (46.8)	1.332 (33.8)	.350 (8.9)	.500 (12.7)	10
112	16	1	2.125 (54.0)	1.544 (39.2)	1.145 (29.1)	.250 (6.4)	.437 (11.1)	6
113	16	1	3.125 (79.4)	1.544 (39.2)	1.145 (29.1)	.250 (6.4)	.437 (11.1)	6
114	12	1	2.125 (54.0)	1.544 (39.2)	.957 (24.3)	.125 (3.2)	.312 (7.9)	4
115	12	1	3.125 (79.4)	1.544 (39.2)	.957 (24.3)	.125 (3.2)	.312 (7.9)	4
116	14	1	2.125 (54.0)	1.544 (39.2)	1.145 (29.1)	.250 (6.4)	.437 (11.1)	6
117	14	1	3.125 (79.4)	1.544 (39.2)	1.145 (29.1)	.250 (6.4)	.437 (11.1)	6
118	16	1	2.125 (54.0)	1.844 (46.8)	1.332 (33.8)	.350 (8.9)	.625 (15.9)	10
119	16	1	3.125 (79.4)	1.844 (46.8)	1.332 (33.8)	.350 (8.9)	.625 (15.9)	10
120	18	1	2.125 (54.0)	1.544 (39.2)	.957 (24.3)	.125 (3.2)	.312 (7.9)	4
121	18	1	3.125 (79.4)	1.544 (39.2)	.957 (24.3)	.125 (3.2)	.312 (7.9)	4
122	18	1	2.125 (54.0)	1.544 (39.2)	1.145 (29.1)	.250 (6.4)	.437 (11.1)	6
123	18	1	3.125 (79.4)	1.544 (39.2)	1.145 (29.1)	.250 (6.4)	.437 (11.1)	6
124	20	1	3.125 (79.4)	1.544 (39.2)	1.145 (29.1)	.250 (6.4)	.437 (11.1)	6
125	20	1	4.125 (104.8)	1.544 (39.2)	1.145 (29.1)	.250 (6.4)	.437 (11.1)	6
126	22	1	3.125 (79.4)	1.544 (39.2)	.957 (24.3)	.125 (3.2)	.312 (7.9)	4
127	22	1	4.125 (104.8)	1.544 (39.2)	.957 (24.3)	.125 (3.2)	.312 (7.9)	4
128	22	1	3.125 (79.4)	1.544 (39.2)	1.145 (29.1)	.250 (6.4)	.437 (11.1)	6
129	22	1	4.125 (104.8)	1.544 (39.2)	1.145 (29.1)	.250 (6.4)	.437 (11.1)	6
130	24	1	3.125 (79.4)	1.844 (46.8)	1.332 (33.8)	.350 (8.9)	.625 (15.9)	10
131	24	1	4.125 (104.8)	1.844 (46.8)	1.332 (33.8)	.350 (8.9)	.625 (15.9)	10
132	36	1	4.125 (104.8)	1.916 (48.7)	1.551 (39.4)	.500 (12.7)	.750 (19.1)	12
133	36	1	5.125 (130.2)	1.916 (48.7)	1.551 (39.4)	.500 (12.7)	.750 (19.1)	12
134	40	1	4.125 (104.8)	1.916 (48.7)	1.551 (39.4)	.500 (12.7)	.750 (19.1)	12
135	40	1	5.125 (130.2)	1.916 (48.7)	1.551 (39.4)	.500 (12.7)	.750 (19.1)	12
136	10	1	2.125 (54.0)	1.544 (39.2)	1.145 (29.1)	.250 (6.4)	.375 (9.5)	6
137	10	1	3.125 (79.4)	1.544 (39.2)	1.145 (29.1)	.250 (6.4)	.375 (9.5)	6
138	12	1	2.125 (54.0)	1.844 (46.8)	1.332 (33.8)	.350 (8.9)	.500 (12.7)	10
139	12	1	3.125 (79.4)	1.844 (46.8)	1.332 (33.8)	.350 (8.9)	.500 (12.7)	10
140	20	1	3.125 (79.4)	2.000 (50.8)	1.770 (45.0)	.625 (15.9)	.904 (23.0)	16
141	20	1	4.125 (104.8)	2.000 (50.8)	1.770 (45.0)	.625 (15.9)	.904 (23.0)	16
142	22	1	3.125 (79.4)	2.230 (56.6)	2.113 (53.7)	.875 (22.2)	1.029 (26.1)	20
143	22	1	4.125 (104.8)	2.230 (56.6)	2.113 (53.7)	.875 (22.2)	1.029 (26.1)	20
144	24	1	3.125 (79.4)	2.230 (56.6)	2.113 (53.7)	.875 (22.2)	1.144 (29.1)	20
145	24	1	4.125 (104.8)	2.230 (56.6)	2.113 (53.7)	.875 (22.2)	1.144 (29.1)	20
146	36	1	4.125 (104.8)	2.600 (66.0)	3.020 (76.7)	1.437 (36.5)	1.840 (46.7)	32
147	36	1	5.125 (130.2)	2.600 (66.0)	3.020 (76.7)	1.437 (36.5)	1.840 (46.7)	32
148	36	1	4.125 (104.8)	2.000 (50.8)	1.770 (45.0)	.625 (15.9)	.937 (23.8)	16
149	36	1	5.125 (130.2)	2.000 (50.8)	1.770 (45.0)	.625 (15.9)	.937 (23.8)	16
150	14	1	2.125 (54.0)	1.544 (39.2)	.957 (24.3)	.125 (3.2)	.312 (7.9)	4
151	14	1	3.125 (79.4)	1.544 (39.2)	.957 (24.3)	.125 (3.2)	.312 (7.9)	4
152	16	1	2.125 (54.0)	1.544 (39.2)	.957 (24.3)	.125 (3.2)	.312 (7.9)	4
153	16	1	3.125 (79.4)	1.544 (39.2)	.957 (24.3)	.125 (3.2)	.312 (7.9)	4
154	44	1	4.125 (104.8)	2.000 (50.8)	1.770 (45.0)	.625 (15.9)	.937 (23.8)	16
155	44	1	5.125 (130.2)	2.000 (50.8)	1.770 (45.0)	.625 (15.9)	.937 (23.8)	16
156	40	1	4.125 (104.8)	2.000 (50.8)	1.770 (45.0)	.625 (15.9)	.937 (23.8)	16
157	40	1	5.125 (130.2)	2.000 (50.8)	1.770 (45.0)	.625 (15.9)	.937 (23.8)	16

Dimensions in inches (millimeters) and are subject to change without notice.