



Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts,Customers Priority,Honest Operation,and Considerate Service",our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

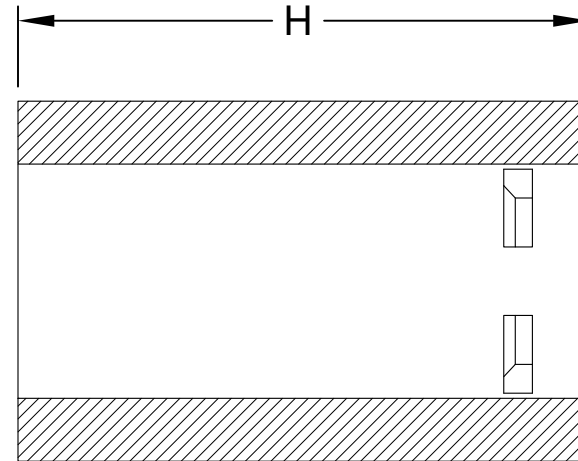
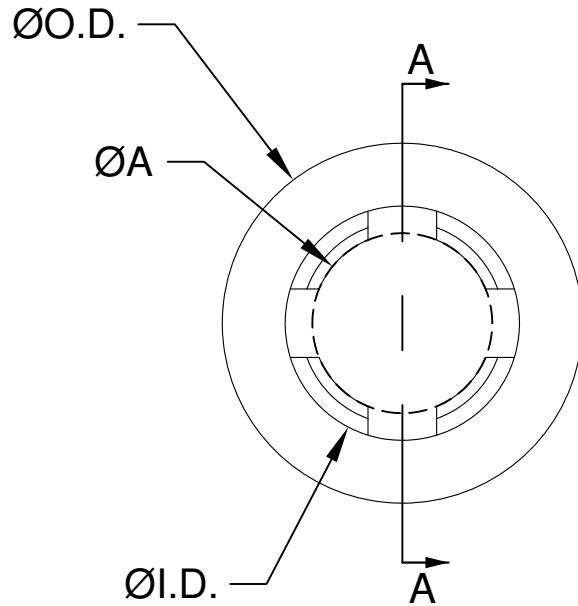
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REV.	DESCRIPTION	DATE	APPROVED
A	Engineering Release	06/30/14	J. C.
B	Engineering Update w/o Changes	05/25/16	J. C.



SECTION A-A

SEE SHEET #2 & #3
 ORDERING INFORMATION:
 FRS X.X-XXLG



2. TOLERANCE "H" DIMENSION:

0.079 - 0.393 (2.0 - 9.9mm)±0.008(0.2mm)

0.394 - 1.101 (10.0 - 27.9mm)±0.012(0.3mm)

1.102 - 1.969 (28.0 - 50mm)±0.020(0.5mm)



1. MATERIAL: NYLON 6/6, UL 94V-2, NATURAL.

STANDARD TOLERANCE (UNLESS OTHERWISE SPECIFIED)		 4 THOMAS, IRVINE, CA. 92618 TEL: (949) 951-8808 FAX: (949) 951-3974	
DECIMALS	ANGULAR		
.X ±.1	X° ±1°	 TITLE: FIRM RETAINING SPACER	
.XX ±.01			
.XXX ±.005			
DESIGNED: A. Wright	DATE: 06/30/14	PART NO: FRSX.X-XXLG	REVISION: B
CHECKED: B. Oliver	DATE: 06/30/14	CAGE CODE : 32559	SHEET # 1 OF 3
CAD GENERATED DOCUMENT. DO NOT MEASURE DRAWING.			

REV.	DESCRIPTION	DATE	APPROVED
	SEE SHEET #1		

SERIES P/N	"H" IN (MM)	I.D. IN (MM)	O.D. IN (MM)	"A" IN (MM)	Screw Size
FRS2.8-02LG	0.079 (2)	0.142 (3.6)	0.217 (5.5)	0.098 (2.5)	4-40 UNC
FRS2.8-03LG	0.118 (3)				
FRS2.8-04LG	0.157 (4)				
FRS2.8-05LG	0.197 (5)				
FRS2.8-06LG	0.236 (6)				
FRS2.8-07LG	0.276 (7)				
FRS2.8-08LG	0.315 (8)				
FRS2.8-09LG	0.354 (9)				
FRS2.8-10LG	0.394 (10)				
FRS2.8-11LG	0.433 (11)				
FRS2.8-12LG	0.472 (12)				
FRS2.8-13LG	0.512 (13)				
FRS2.8-14LG	0.551 (14)				
FRS2.8-15LG	0.591 (15)				
FRS2.8-16LG	0.630 (16)				
FRS2.8-17LG	0.669 (17)				
FRS2.8-18LG	0.709 (18)				
FRS2.8-19LG	0.748 (19)				
FRS2.8-20LG	0.787 (20)				
FRS2.8-21LG	0.827 (21)				
FRS2.8-22LG	0.866 (22)				
FRS2.8-23LG	0.906 (23)				
FRS2.8-24LG	0.945 (24)				
FRS2.8-25LG	0.984 (25)				
FRS2.8-26LG	1.024 (26)				
FRS2.8-27LG	1.063 (27)				
FRS2.8-28LG	1.102 (28)				
FRS2.8-29LG	1.142 (29)				
FRS2.8-30LG	1.181 (30)				



SERIES P/N	"H" IN (MM)	I.D. IN (MM)	O.D. IN (MM)	"A" IN (MM)	Screw Size
FRS3.0-02LG	0.079 (2)	0.142 (3.6)	0.217 (5.5)	0.106 (2.7)	M3
FRS3.0-03LG	0.118 (3)				
FRS3.0-04LG	0.157 (4)				
FRS3.0-05LG	0.197 (5)				
FRS3.0-06LG	0.236 (6)				
FRS3.0-07LG	0.276 (7)				
FRS3.0-08LG	0.315 (8)				
FRS3.0-09LG	0.354 (9)				
FRS3.0-10LG	0.394 (10)				
FRS3.0-11LG	0.433 (11)				
FRS3.0-12LG	0.472 (12)				
FRS3.0-13LG	0.512 (13)				
FRS3.0-14LG	0.551 (14)				
FRS3.0-15LG	0.591 (15)				
FRS3.0-16LG	0.630 (16)				
FRS3.0-17LG	0.669 (17)				
FRS3.0-18LG	0.709 (18)				
FRS3.0-19LG	0.748 (19)				
FRS3.0-20LG	0.787 (20)				
FRS3.0-21LG	0.827 (21)				
FRS3.0-22LG	0.866 (22)				
FRS3.0-23LG	0.906 (23)				
FRS3.0-24LG	0.945 (24)				
FRS3.0-25LG	0.984 (25)				
FRS3.0-26LG	1.024 (26)				
FRS3.0-27LG	1.063 (27)				
FRS3.0-28LG	1.102 (28)				
FRS3.0-29LG	1.142 (29)				
FRS3.0-30LG	1.181 (30)				

STANDARD TOLERANCE (UNLESS OTHERWISE SPECIFIED)		 BIVAR [®] 4 THOMAS, IRVINE, CA. 92618 TEL: (949) 951-8808 FAX: (949) 951-3974	
DECIMALS	ANGULAR		
.X ± .1	X° ± 1°		TITLE: FIRM RETAINING SPACER
.XX ± .01			DESIGNED: A. Wright
.XXX ± .005		CHECKED: B. Oliver	DATE: 06/30/14
		PART NO: FRSX.X-XXLG	REVISION: B
		CAGE CODE : 32559	SHEET # 2 OF 3
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REV.	DESCRIPTION	DATE	APPROVED
	SEE SHEET #1		

SERIES P/N	"H" IN (MM)	I.D. IN (MM)	O.D. IN (MM)	"A" IN (MM)	Screw Size
FRS3.5-02LG	0.079 (2)	0.161 (4.1)	0.248 (6.3)	0.124 (3.1)	M3.5
FRS3.5-03LG	0.118 (3)				
FRS3.5-04LG	0.157 (4)				
FRS3.5-05LG	0.197 (5)				
FRS3.5-06LG	0.236 (6)				
FRS3.5-07LG	0.276 (7)				
FRS3.5-08LG	0.315 (8)				
FRS3.5-09LG	0.354 (9)				
FRS3.5-10LG	0.394 (10)				
FRS3.5-11LG	0.433 (11)				
FRS3.5-12LG	0.472 (12)				
FRS3.5-13LG	0.512 (13)				
FRS3.5-14LG	0.551 (14)				
FRS3.5-15LG	0.591 (15)				
FRS3.5-16LG	0.630 (16)				
FRS3.5-17LG	0.669 (17)				
FRS3.5-18LG	0.709 (18)				
FRS3.5-19LG	0.748 (19)				
FRS3.5-20LG	0.787 (20)				
FRS3.5-21LG	0.827 (21)				
FRS3.5-22LG	0.866 (22)				
FRS3.5-23LG	0.906 (23)				
FRS3.5-24LG	0.945 (24)				
FRS3.5-25LG	0.984 (25)				
FRS3.5-26LG	1.024 (26)				
FRS3.5-27LG	1.063 (27)				
FRS3.5-28LG	1.102 (28)				
FRS3.5-29LG	1.142 (29)				
FRS3.5-30LG	1.181 (30)				

SERIES P/N	"H" IN (MM)	I.D. IN (MM)	O.D. IN (MM)	"A" IN (MM)	Screw Size
FRS4.0-02LG	0.079 (2)	0.185 (4.7)	0.276 (7.0)	0.146 (3.7)	M4.0
FRS4.0-03LG	0.118 (3)				
FRS4.0-04LG	0.157 (4)				
FRS4.0-05LG	0.197 (5)				
FRS4.0-06LG	0.236 (6)				
FRS4.0-07LG	0.276 (7)				
FRS4.0-08LG	0.315 (8)				
FRS4.0-09LG	0.354 (9)				
FRS4.0-10LG	0.394 (10)				
FRS4.0-11LG	0.433 (11)				
FRS4.0-12LG	0.472 (12)				
FRS4.0-13LG	0.512 (13)				
FRS4.0-14LG	0.551 (14)				
FRS4.0-15LG	0.591 (15)				
FRS4.0-16LG	0.630 (16)				
FRS4.0-17LG	0.669 (17)				
FRS4.0-18LG	0.709 (18)				
FRS4.0-19LG	0.748 (19)				
FRS4.0-20LG	0.787 (20)				
FRS4.0-21LG	0.827 (21)				
FRS4.0-22LG	0.866 (22)				
FRS4.0-23LG	0.906 (23)				
FRS4.0-24LG	0.945 (24)				
FRS4.0-25LG	0.984 (25)				
FRS4.0-26LG	1.024 (26)				
FRS4.0-27LG	1.063 (27)				
FRS4.0-28LG	1.102 (28)				
FRS4.0-29LG	1.142 (29)				
FRS4.0-30LG	1.181 (30)				

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