

MIL-DTL-83513 Micro-D Connectors

R04A Series Solder Cup Connectors



Brief Introduction

- Micro-D Connectors
- Twist Pin Contacts, High Density
- Metal Shell, Nickel, Gold or Cadmium Plating
- Solder Cup Connectors
- Meets MIL-DTL-83513

Specifications

Environment Temperature:	-55°C ~ +125°C
Vibration:	10Hz~2000Hz, 196m/s ²
Random Vibration:	Power spectrum density 0.4G ² /Hz, root mean square value of total acceleration 23.1G
Shock:	735m/s ² 11ms
Rated Current:	3A
Contact Resistance:	≤10mΩ
Insulation Resistance:	≥5000MΩ
Dielectric Strength:	800V
Durability:	500 times

Product Stereogram



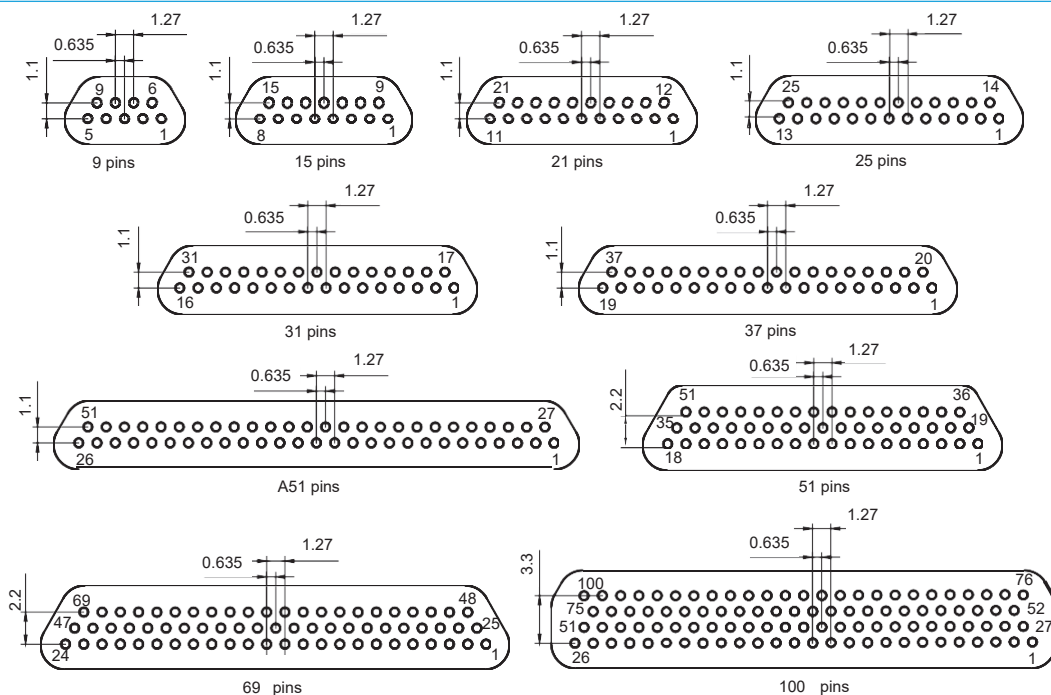
Plug



Receptacle



Contact Arrangements



Mating Face of Male Connectors

How To Order

Sample Part Number

R04A

-31

PI

J

B01

G

AB

Series:

R04A—Micro-D Connectors for MIL-DTL-83513

Contact Number:

9, 15, 21, 25, 31, 37, A51, 51, 69, 100pins

Contact Type:

PI—Pin in Plug RH—Socket in Receptacle

Tail Termination Style:

J—Solder Cup

Locking Hardware Type:

B01—Locking Hardware Type (See page 5 to 9)

No Code—No Locking Hardware

Shell Material and Finish:

G—Aluminum Shell, Cadmium Plating

No Code—Aluminum Shell, Nickel Plating

U—Aluminum Shell, Gold Plating

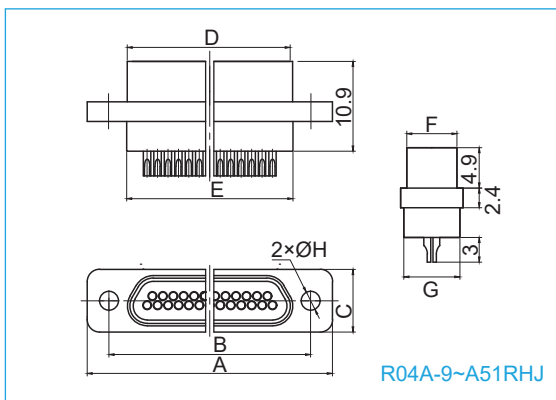
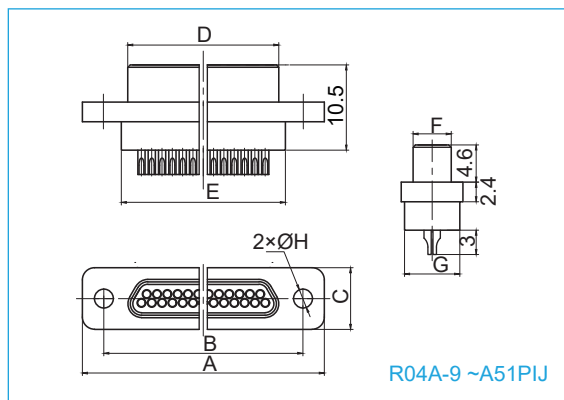
Backshell Type:

AB—Backshell Type (See page 10 to 12)

No Code—No Backshell

R04A Series Solder Cup Connectors

Outline Dimensions



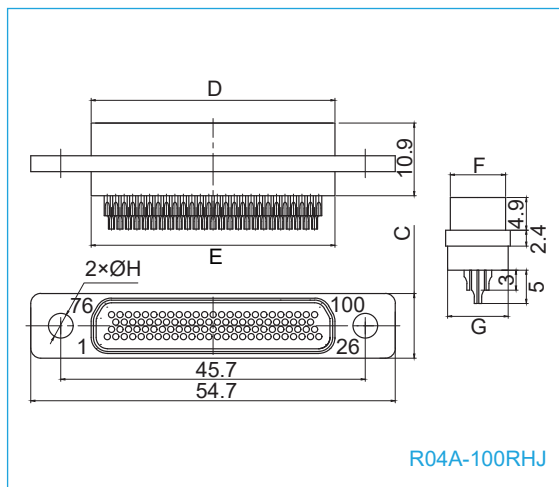
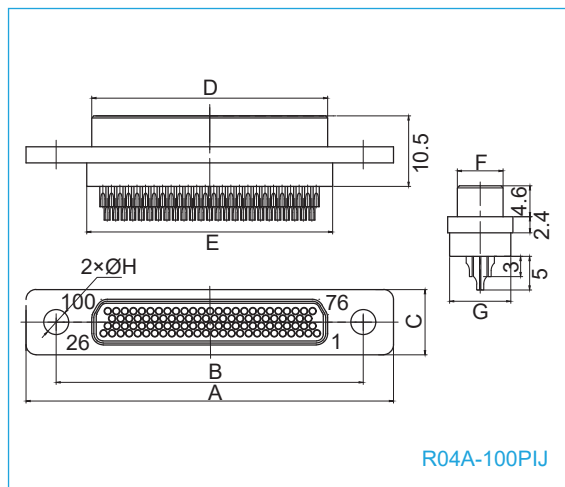
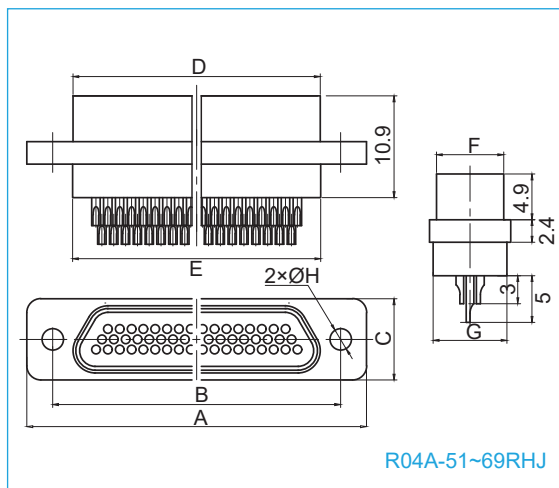
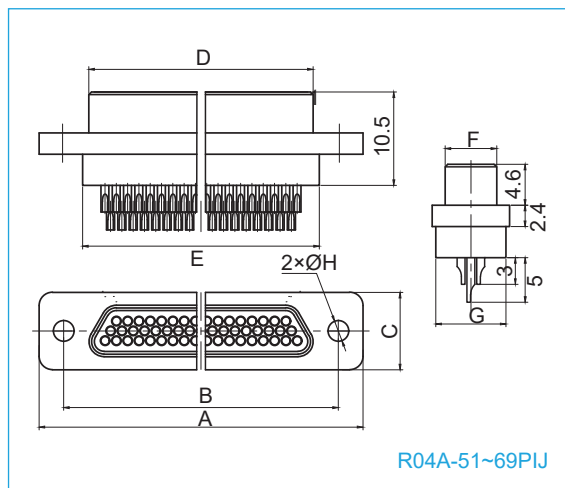
Part Number	Outline Dimensions							
	A ±0.10	B ±0.10	C ±0.10	D ±0.10	E ±0.10	F ±0.10	G ±0.10	H
R04A-9PIJ	19.6	14.3	7.6	8.4	9.9	4.7	6.8	2.31
R04A-15PIJ	23.5	18.2	7.6	12.3	13.8	4.7	6.8	2.31
R04A-21PIJ	27.3	22	7.6	16.1	17.6	4.7	6.8	2.31
R04A-25PIJ	29.8	24.5	7.6	18.6	20.2	4.7	6.8	2.31
R04A-31PIJ	33.6	28.3	7.6	22.4	24	4.7	6.8	2.31
R04A-37PIJ	37.4	32.1	7.6	26.2	27.8	4.7	6.8	2.31
R04A-A51PIJ	46.3	41	7.6	35	36.7	4.7	6.8	2.31
R04A-9RHJ	19.6	14.3	7.6	9.9	9.9	6.1	6.8	2.31
R04A-15RHJ	23.5	18.2	7.6	13.7	13.8	6.1	6.8	2.31
R04A-21RHJ	27.3	22	7.6	17.5	17.6	6.1	6.8	2.31
R04A-25RHJ	29.8	24.5	7.6	20.1	20.2	6.1	6.8	2.31
R04A-31RHJ	33.6	28.3	7.6	23.9	24	6.1	6.8	2.31
R04A-37RHJ	37.4	32.1	7.6	27.7	27.8	6.1	6.8	2.31
R04A-A51RHJ	46.3	41	7.6	36.5	36.7	6.1	6.8	2.31

Remark: All dimensions are in mm.



R04A Series Solder Cup Connectors

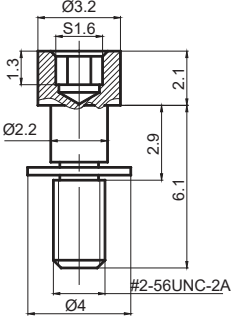
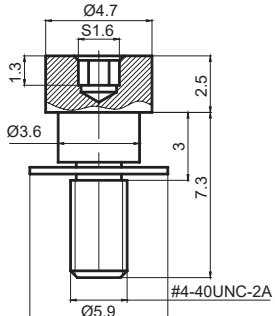
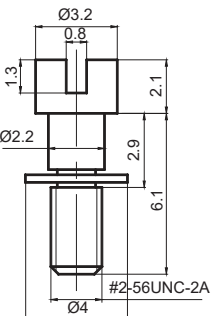
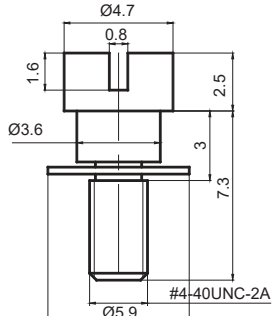
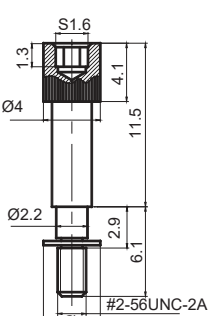
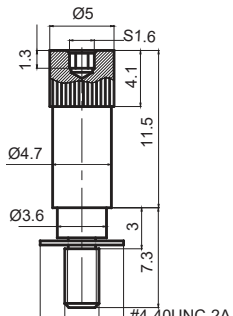
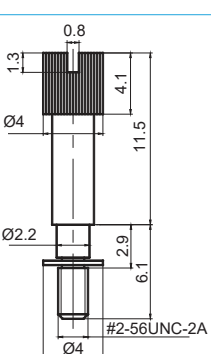
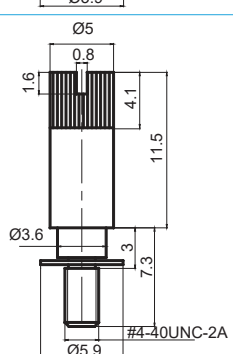
Outline Dimensions



Part Number	Outline Dimensions							
	A ±0.10	B ±0.10	C ±0.10	D ±0.10	E ±0.10	F ±0.10	G ±0.10	H
R04A-51PIJ	36.2	30.9	8.7	25	26.6	5.8	7.9	2.31
R04A-69PIJ	43.8	38.5	8.7	32.6	34.2	5.8	7.9	2.31
R04A-100PIJ	54.7	45.7	9.7	35.1	36.6	6.8	9.1	3.7
R04A-51RHJ	36.2	30.9	8.7	26.5	26.6	7.2	7.9	2.31
R04A-69RHJ	43.8	38.5	8.7	34.1	34.2	7.2	7.9	2.31
R04A-100RHJ	54.7	45.7	9.7	36.6	36.6	8.3	9.1	3.7

Remark: All dimensions are in mm.

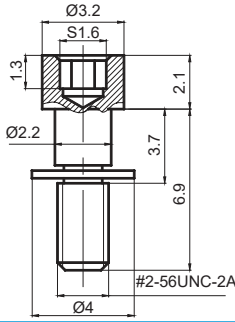
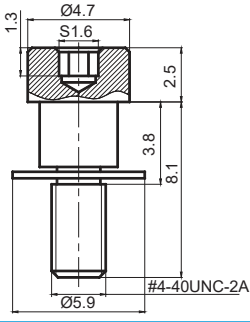
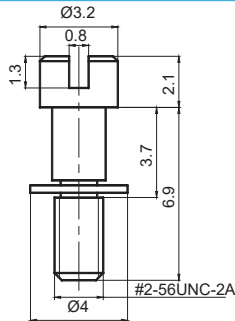
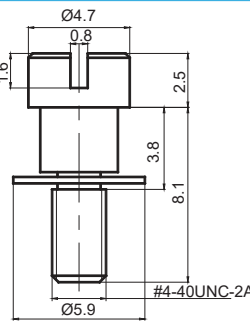
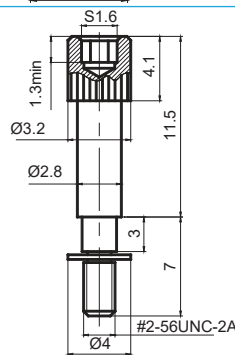
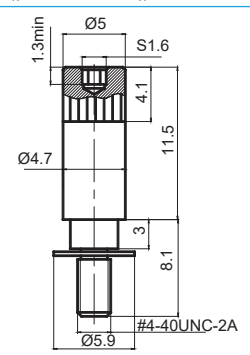
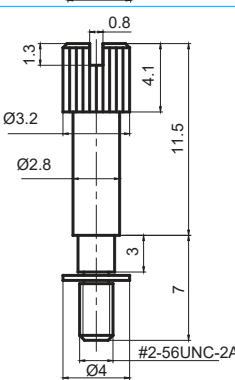
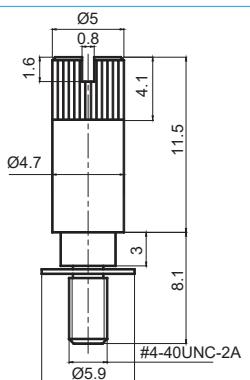
Locking Hardware

Code	Feature	Outline Dimensions	
		9~69pins	100pins
B01	1. Removable 2. Short Jackscrew with A Retainer Ring 3. Hex Head		
B02	1. Removable 2. Short Jackscrew with A Retainer Ring 3. Slot Head		
B03	1. Removable 2. Long Jackscrew with A Retainer Ring 3. Hex Head		
B04	1. Removable 2. Long Jackscrew with A Retainer Ring 3. Slot Head		

Remark: All dimensions are in mm.



Locking Hardware

Code	Feature	Outline Dimensions	
		9~69pins	100pins
B05	1. Removable 2. Short Jackscrew with A Retainer Ring 3. Hex Head 4. For Connectors with AA, AB, AC, AD or AG Type Backshells		
B06	1. Removable 2. Short Jackscrew with A Retainer Ring 3. Slot Head 4. For Connectors with AA, AB, AC, AD or AG Type Backshells		
B07	1. Removable 2. Long Jackscrew with A Retainer Ring 3. Hex Head 4. For Connectors with AA, AB, AC, AD or AG Type Backshells		
B08	1. Removable 2. Long Jackscrew with A Retainer Ring 3. Slot Head 4. For Connectors with AA, AB, AC, AD or AG Type Backshells		

Remark: All dimensions are in mm.



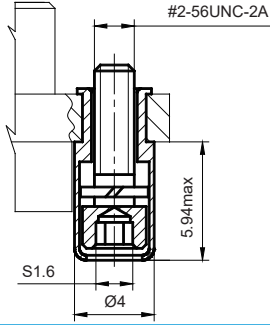
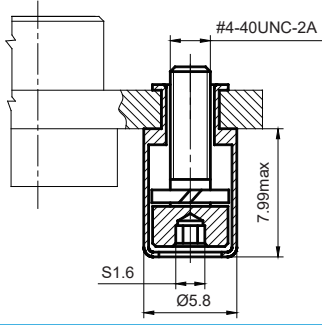
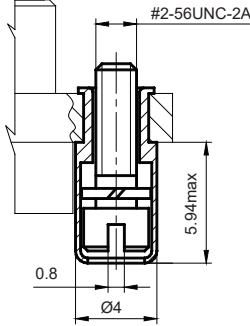
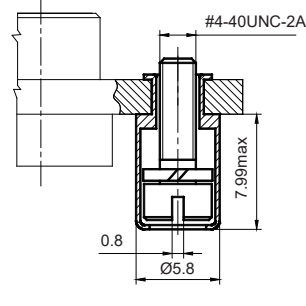
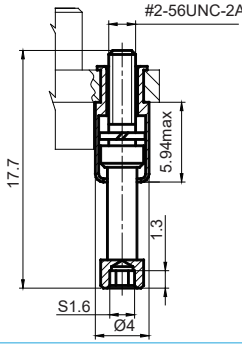
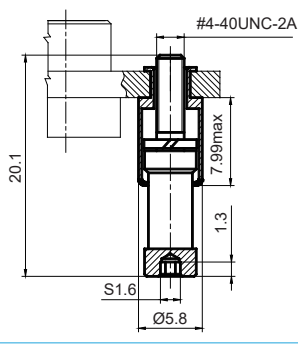
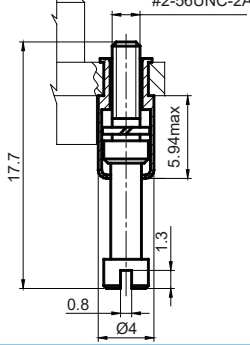
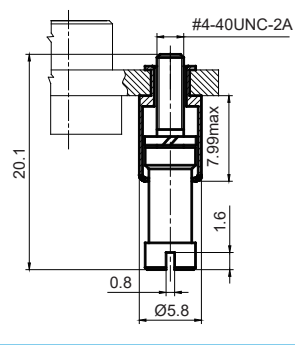
Locking Hardware

Code	Feature	Outline Dimensions	
		9~69pins	100pins
B10	1. Removable 2. Short Jackscrew with A Retainer Ring 3. Hex Head 4. For Connectors with AH or AJ Type Backshells		
B11	1. Removable 2. Short Jackscrew with A Retainer Ring 3. Slot Head 4. For Connectors with AH or AJ Type Backshells		
B12	1. Removable 2. Long Jackscrew with A Retainer Ring 3. Hex Head 4. For Connectors with AH or AJ Type Backshells		
B13	1. Removable 2. Slot Long Jackscrew with A Retainer Ring 3. Slot Head 4. For Connectors with AH or AJ Type Backshells		

Remark: All dimensions are in mm.

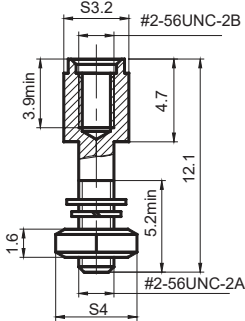
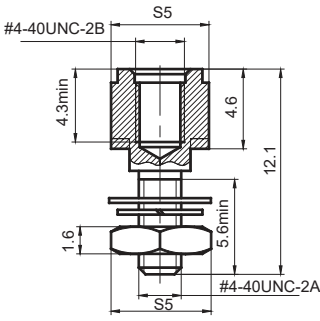
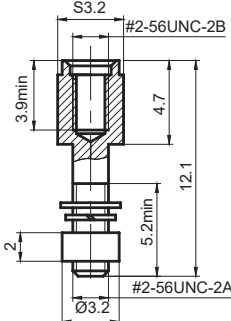
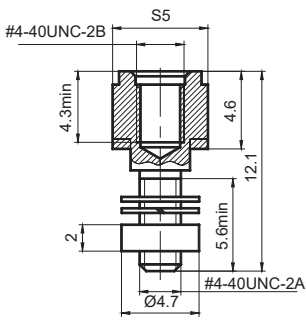
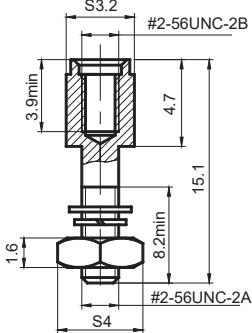
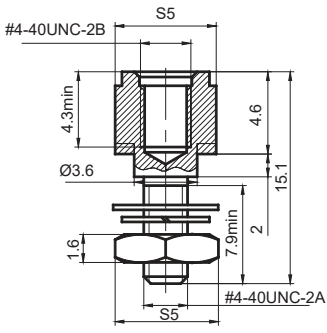


Locking Hardware

Code	Feature	Outline Dimensions	
		9~69pins	100pins
S01	1. Non-Removable 2. Short Jackscrew with A Retainer Sleeve 3. Hex Head		
S02	1. Non-Removable 2. Short Jackscrew with A Retainer Sleeve 3. Slot Head		
S03	1. Non-Removable 2. Long Jackscrew with A Retainer Sleeve 3. Hex Head		
S04	1. Non-Removable 2. Long Jackscrew with A Retainer Sleeve 3. Slot Head		

Remark: All dimensions are in mm.

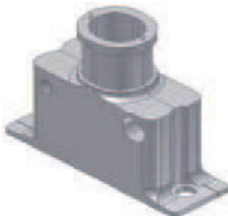
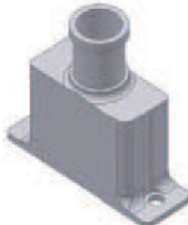
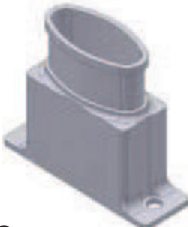
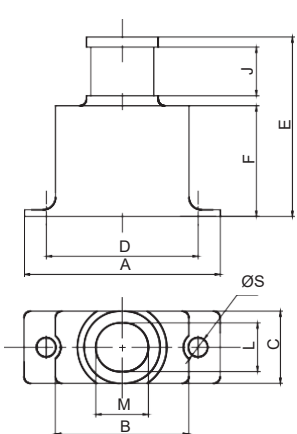
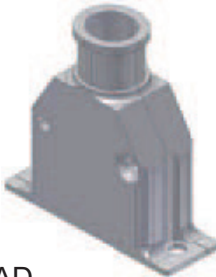
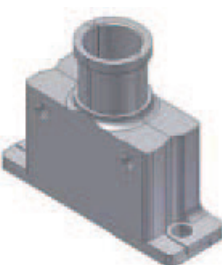
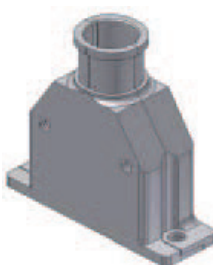
Locking Hardware

Code	Feature	Outline Dimensions	
		9~69pins	100pins
N01	1. Hex Head Jackpost 2. For Front Panel Mounting 3. Panel Thickness is Not More Than 2mm		
N06	1. Hex Head Jackpost 2. For Connectors with Backshells		
N07	1. Hex Head Jackpost 2. For Front Panel Mounting 3. Panel Thickness is Not More Than 5mm		

Remark: All dimensions are in mm.



Backshells

Stereogram & Feature			Outline Dimensions
 AA AA Style: Two-Piece, Standard Type	 AB AB Style: One-Piece, Standard Type	 AC AC Style: One-Piece, Wide Entry	
 AD AD Style: Two-Piece, Elongated Type	 AH AH Style: Two-Piece, Non-Skid Type	 AJ AJ Style: Two-Piece, Non-Skid And Elongated Type	
 AG AG Style: One-Piece, Standard Type with 90° Entry			

Remark: All dimensions are in mm.

Outline Dimensions Of Backshells

Part Number	Outline Dimensions									
	A ±0.10	B ±0.10	C ±0.10	D ±0.10	E ±0.10	F ±0.10	J ±0.10	ØS	L ±0.10	M ±0.10
R04A-9-AA	19.6	12.1	8.7	14.3	21.4	13.2	5.8	2.31	-	4.7
R04A-15-AA	23.5	16	8.7	18.2	21.4	13.2	5.8	2.31	-	5.8
R04A-21-AA	27.3	19.8	8.7	22	21.4	13.2	5.8	2.31	-	6.5
R04A-25-AA	29.8	22.3	8.7	24.5	21.4	13.2	5.8	2.31	6.6	7.9
R04A-31-AA	33.6	26.1	8.7	28.3	21.4	13.2	5.8	2.31	6.6	8.4
R04A-37-AA	37.4	29.9	8.7	32.1	21.4	13.2	5.8	2.31	6.6	9.5
R04A-A51-AA	46.3	38.8	8.7	41	21.4	13.2	5.8	2.31	6.6	13.1
R04A-51-AA	36.2	28.7	9.7	30.9	23.7	15.5	5.8	2.31	7.5	11.9
R04A-69-AA	43.8	36.3	9.7	38.5	23.7	15.5	5.8	2.31	7.5	15.7
R04A-100-AA	54.7	38.8	11	45.7	24.2	16	5.8	3.7	8.7	17.5
R04A-9-AB	19.6	11.2	8.7	14.3	21.4	13.2	5.8	2.31	-	4.7
R04A-15-AB	23.5	15	8.7	18.2	21.4	13.2	5.8	2.31	-	5.8
R04A-21-AB	27.3	18.8	8.7	22	21.4	13.2	5.8	2.31	-	6.5
R04A-25-AB	29.8	21.4	8.7	24.5	21.4	13.2	5.8	2.31	6.7	7.8
R04A-31-AB	33.6	25.2	8.7	28.3	21.4	13.2	5.8	2.31	6.7	8.3
R04A-37-AB	37.4	29	8.7	32.1	21.4	13.2	5.8	2.31	6.7	9.5
R04A-A51-AB	46.3	37.9	8.7	41	21.4	13.2	5.8	2.31	6.7	13
R04A-51-AB	36.2	27.8	9.7	30.9	23.7	15.5	5.8	2.31	7.5	11.9
R04A-69-AB	43.8	35.4	9.7	38.5	23.7	15.5	5.8	2.31	7.5	15.7
R04A-100-AB	54.7	38.7	11	45.7	24.2	16	5.8	3.7	8.7	17.4
R04A-9-AC	19.6	11.2	8.7	14.3	21.4	13.2	5.8	2.31	6.7	7.9
R04A-15-AC	23.5	15	8.7	18.2	21.4	13.2	5.8	2.31	6.7	11.6
R04A-21-AC	27.3	18.8	8.7	22	21.4	13.2	5.8	2.31	6.7	15.4
R04A-25-AC	29.8	21.4	8.7	24.5	21.4	13.2	5.8	2.31	6.7	18
R04A-31-AC	33.6	25.2	8.7	28.3	21.4	13.2	5.8	2.31	6.7	21.8
R04A-37-AC	37.4	29	8.7	32.1	21.4	13.2	5.8	2.31	6.7	25.6
R04A-A51-AC	46.3	37.9	8.7	41	21.4	13.2	5.8	2.31	6.7	26.2
R04A-51-AC	36.2	27.8	9.7	30.9	23.7	15.5	5.8	2.31	7.5	23.4
R04A-69-AC	43.8	35.4	9.7	38.5	23.7	15.5	5.8	2.31	7.5	29.4
R04A-100-AC	54.7	38.7	11	45.7	24.2	16	5.8	3.7	8.7	34.1
R04A-9-AD	19.6	12.1	8.7	14.3	29.4	21.2	5.8	2.31	-	4.7
R04A-15-AD	23.5	16	8.7	18.2	29.4	21.2	5.8	2.31	-	5.8
R04A-21-AD	27.3	19.8	8.7	22	29.4	21.2	5.8	2.31	-	6.5
R04A-25-AD	29.8	22.3	8.7	24.5	29.4	21.2	5.8	2.31	6.6	7.9
R04A-31-AD	33.6	26.1	8.7	28.3	29.4	21.2	5.8	2.31	6.6	8.4

Remark: All dimensions are in mm.



Outline Dimensions Of Backshells

Part Number	Outline Dimensions									
	A ±0.10	B ±0.10	C ±0.10	D ±0.10	E ±0.10	F ±0.10	J ±0.10	ØS	L ±0.10	M ±0.10
R04A-31-AH	33.6	25.2	8.7	28.3	21.4	13.2	5.8	2.31	6.7	8.3
R04A-37-AH	37.4	29	8.7	32.1	21.4	13.2	5.8	2.31	6.7	9.5
R04A-A51-AH	46.3	37.9	8.7	41	21.4	13.2	5.8	2.31	6.7	13
R04A-51-AH	36.2	27.8	9.7	30.9	23.7	15.5	5.8	2.31	7.5	11.9
R04A-69-AH	43.8	35.4	9.7	38.5	23.7	15.5	5.8	2.31	7.5	15.7
R04A-100-AH	54.7	38.7	11	45.7	24.2	16	5.8	3.7	8.7	17.4
R04A-9-AJ	19.6	12.1	8.7	14.3	29.4	21.2	5.8	2.31	-	4.7
R04A-15-AJ	23.5	16	8.7	18.2	29.4	21.2	5.8	2.31	-	5.8
R04A-21-AJ	27.3	19.8	8.7	22	29.4	21.2	5.8	2.31	-	6.5
R04A-25-AJ	29.8	22.3	8.7	24.5	29.4	21.2	5.8	2.31	6.6	7.9
R04A-31-AJ	33.6	26.1	8.7	28.3	29.4	21.2	5.8	2.31	6.6	8.4
R04A-37-AJ	37.4	29.9	8.7	32.1	29.4	21.2	5.8	2.31	6.6	9.5
R04A-A51-AJ	46.3	38.8	8.7	41	29.4	21.2	5.8	2.31	6.6	13.1
R04A-51-AJ	36.2	28.7	9.7	30.9	31.7	23.5	5.8	2.31	7.5	11.9
R04A-69-AJ	43.8	36.3	9.7	38.5	31.7	23.5	5.8	2.31	7.5	15.7
R04A-100-AJ	54.7	38.8	11	45.7	32.2	24	5.8	3.7	8.7	17.5
R04A-9-AG	19.6	11.2	8.7	14.3	17.3	19.4	-	2.31	-	4.7
R04A-15-AG	23.5	15	8.7	18.2	18.4	23.2	-	2.31	-	5.8
R04A-21-AG	27.3	18.8	8.7	22	19.1	27	-	2.31	-	6.5
R04A-25-AG	29.8	21.4	8.7	24.5	20.4	29.6	-	2.31	6.7	7.8
R04A-31-AG	33.6	25.2	8.7	28.3	20.9	33.4	-	2.31	6.7	8.3
R04A-37-AG	37.4	29	8.7	32.1	22.1	37.2	-	2.31	6.7	9.5
R04A-A51-AG	46.3	37.9	8.7	41	25.6	46.1	-	2.31	6.7	13
R04A-51-AG	36.2	27.8	9.7	30.9	24.5	36	-	2.31	7.5	11.9
R04A-69-AG	43.8	35.4	9.7	38.5	28.3	43.6	-	2.31	7.5	15.7
R04A-100-AG	54.7	38.7	11	45.7	30	46.9	-	3.7	8.7	17.4

Remark: All dimensions are in mm.