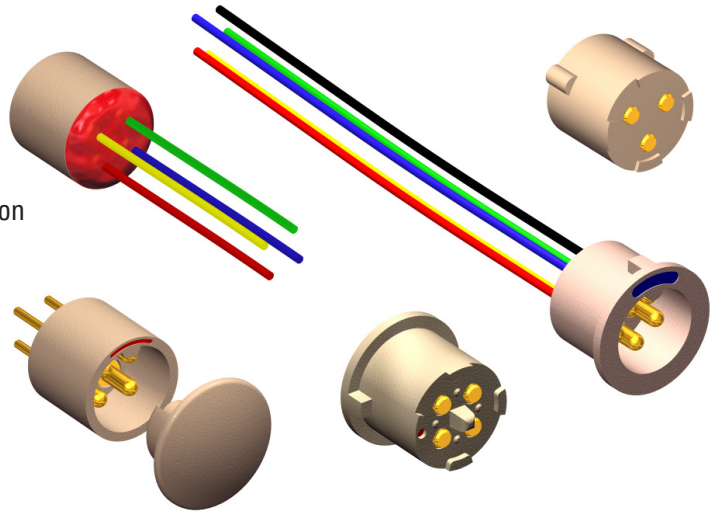


Features

- ⊕ Suitable for programming applications
- ⊕ Reinforcement on back of sockets - only on parts with flexible terminals
- ⊕ Socket Ø 2.55 mm [0.10"]
- ⊕ Ground terminal will establish initial contact
- ⊕ Different plastic colors available
- ⊕ Available with SMD, rigid or flexible terminals
- ⊕ Flexible terminals available with or without insulation



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Sonion reserves the right to make changes at any time to improve reliability, function or design, in order to provide the best product possible.

History Revision

Revision Number/Date	Change from last revision
08 / Jan 06	History Revision added. CS 43 Socket No. 06, CS 43 Socket No. 07, CS 44 Socket No. 05, CS 44 Socket No. 11, CS 44 Socket No. 12, CS 44 Socket No. 16, CS 44 socket No. 17 and CS 45 Socket No. 05 added.
09 / Mar 07	CS 43 style 23 SMD and CS 44 style 24 SMD versions added.
10 / Jul 07	Housing style CS 44 no. 06 corrected.
MT1009.A (11/08)	Terminal lengths specified.
011/JUL-22-2009	Socket no. 16: Mechanical dimensions corrected. SMD Packaging added. Storage humidity added.
012/SEP-29-2009	Plastic material for CS 44 No. 24 SMD socket specified.
013/JUN-15-2010	CS 43 Socket No. 04, CS 44 Socket No. 05 and CS 45 Socket No. 05 removed.

Mechanical Specifications

Connection force:

CS 43	Min. 2.5 N
CS 44	Min. 3.0 N
CS 45	Min. 3.5 N

Disconnection force:

CS 43	Min. 5.5 N
CS 44	Min. 6.0 N
CS 45	Min. 6.5 N

Lifetime:

-Connection and disconnection of socket.....	Min. 10,000 cycles
--	--------------------

Bending of terminals:

-Rigid terminals	Min. 1 bending cycles 90°, min. 0.5mm [0.02"] from bottom
-Flexible, non insulated terminals	Min. 5 bending cycles 90°, min. 0.5mm [0.02"] from bottom
-Flexible, lacquer insulated terminals.....	Min. 5 bending cycles 90°, min. 0.5mm [0.02"] from bottom

Pull strength of contact terminals all types, initially.....	Min. 7 N
--	----------

Electrical Specifications

Contact resistance.....	Max. 100 mΩ
Contact resistance when pulling with 1N in all directions.....	Max. 150 mΩ (max. allowed change 5mΩ)
Insulation resistance between terminals.....	Min. 1 MΩ
Continuous current.....	Max. 150 mA

Material Specifications

All materials comply with RoHS directive (2002/95/EC)



Rigid terminals	CuNiZn, gold plated
SMD and flexible terminals, insulated	Cu, silver plated
Flexible terminals, uninsulated	Ag
Plastic parts	PA 6.6

Lubricant, glue / seal, and paint specifications are proprietary information.

Environmental Conditions

Storage temperature	-40 to +60°C
Storage humidity	10 to 95% RH

Recommended Process Parameters

Gluing:

Types of glue

Cyanoacrylates (non-blooming) , i.e. Loctite 401, 408, 460 and Sicomet 50, 63, 77

Non-blooming types must be used to ensure that residuals from the curing process do not degrade the component.

Soldering:

Soldering temperature and time

300°C [572°F] for 3 s or 350°C [662°F] for 1 s
--

Soldering distance

Min. 0.5 mm [0.02"] from housing

Exceeding temperature, time and distance recommendations may damage the component.

Mechanical stress on soldering terminals must be avoided during soldering.

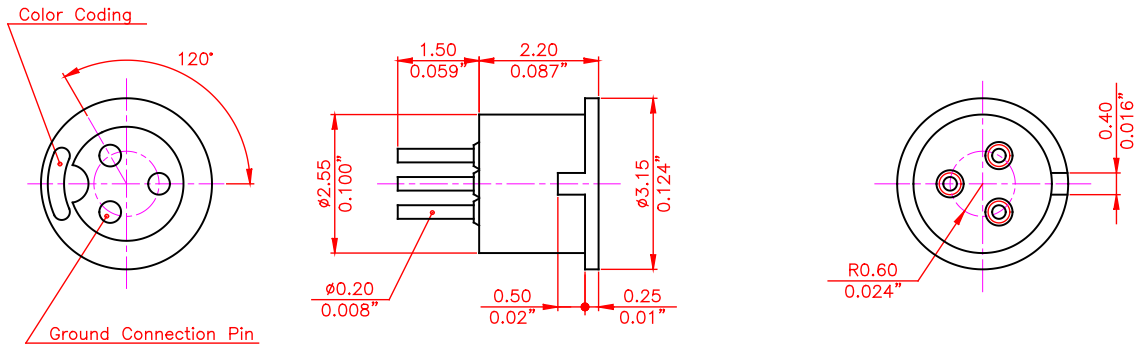
Cleaning:

Cleaning solvents

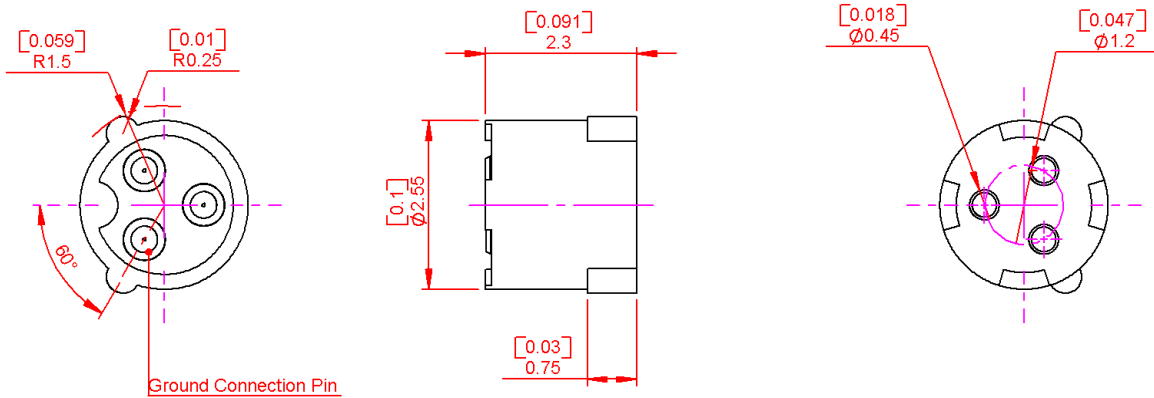
Aqua wash (Alpha 2110), Benzine

Mechanical Dimensions

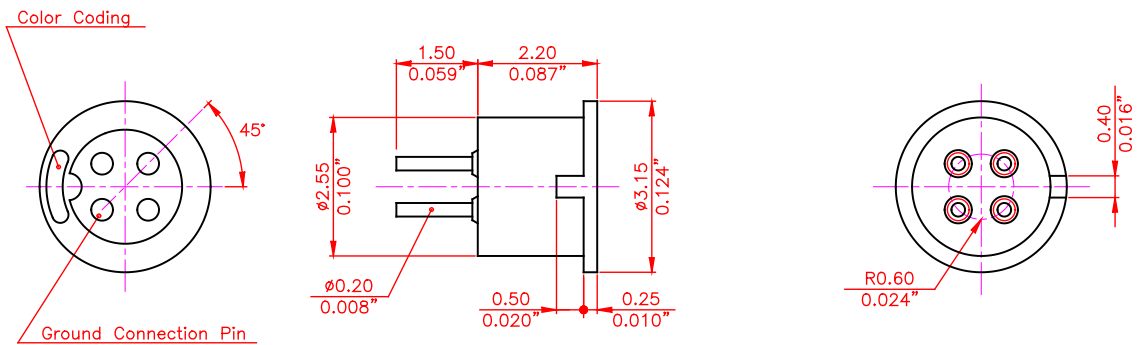
CS 43



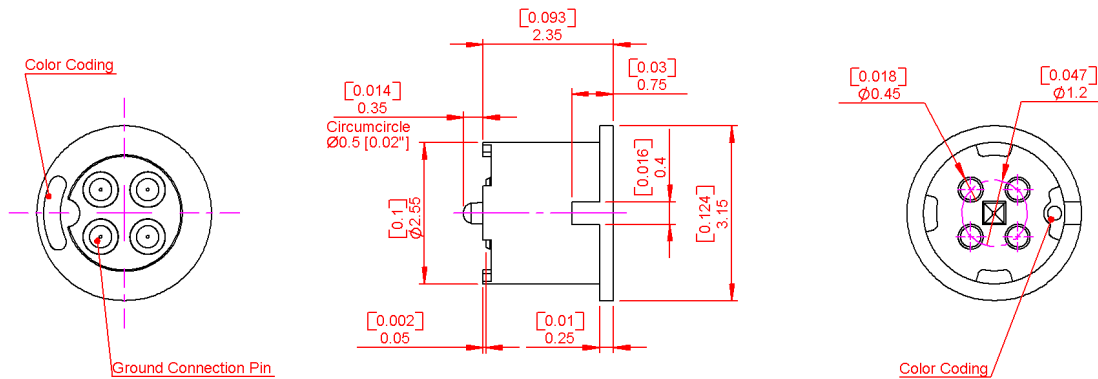
CS 43 SMD version



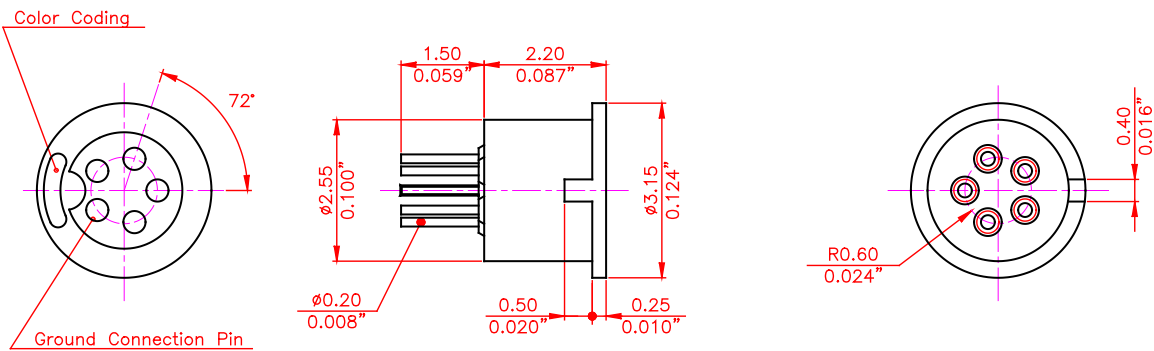
CS 44



CS 44 SMD version

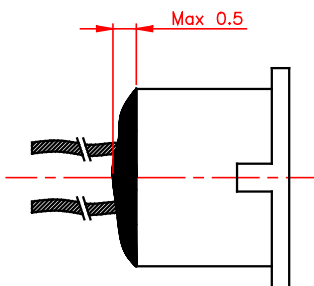


CS 45



CS 43-44-45 Back reinforcement option

Flexible terminals only

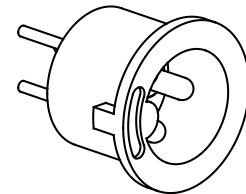
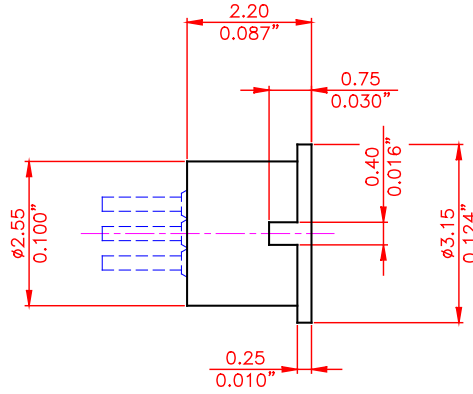
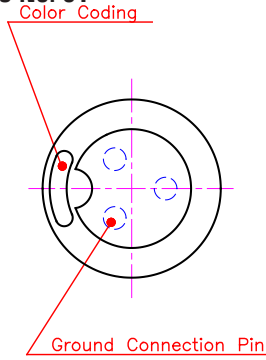


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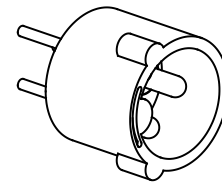
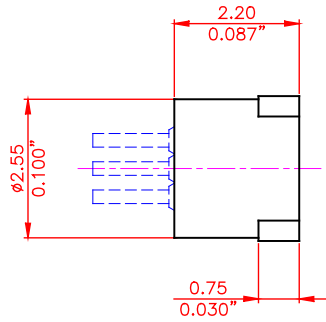
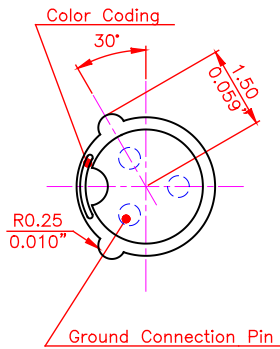
The standard measurement tolerance on the drawings is ± 0.05 mm/[0.002"] and $\pm 2^\circ$. Tolerances which differ from this value will be indicated on the drawings.

Socket Styles

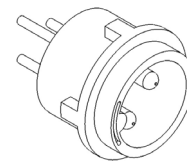
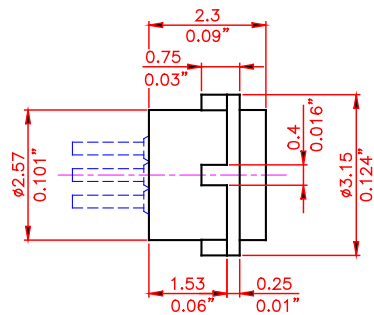
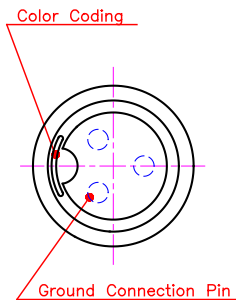
CS 43 No. 01



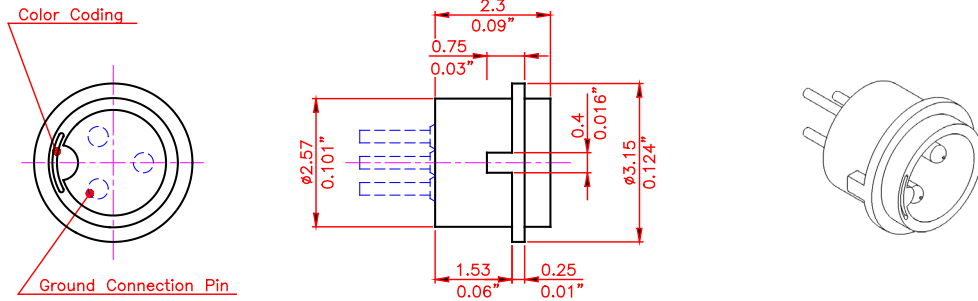
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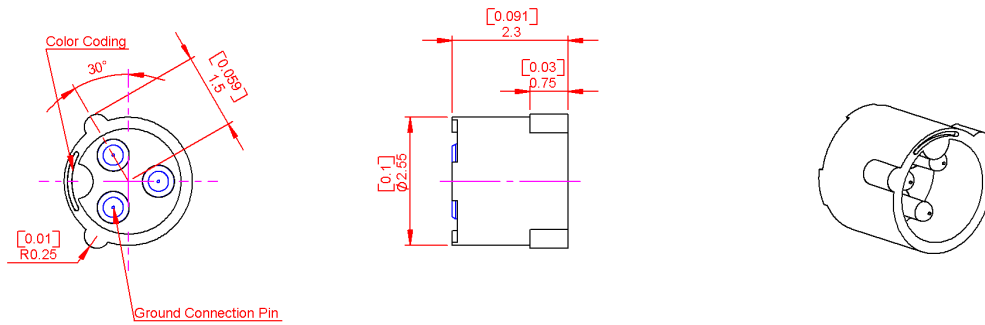
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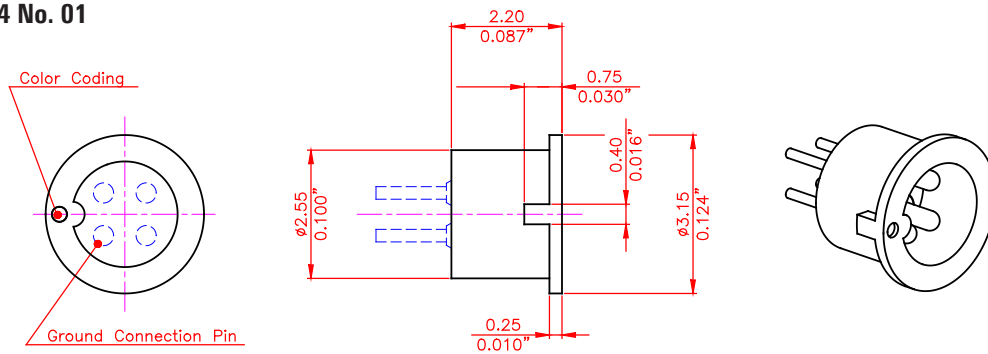
CS 43 No. 07



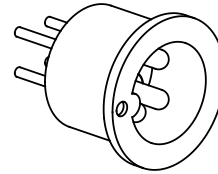
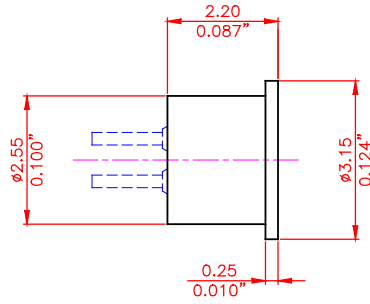
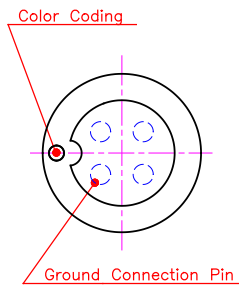
CS 43 No. 23 SMD



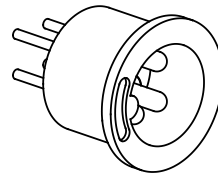
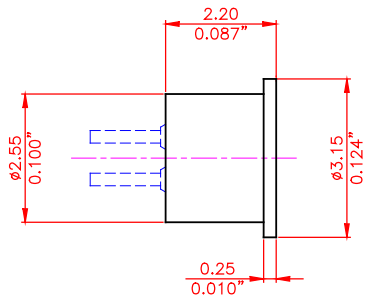
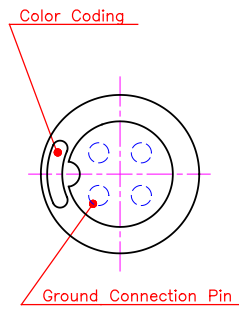
CS 44 No. 01



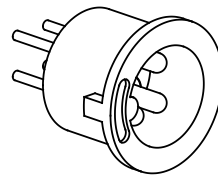
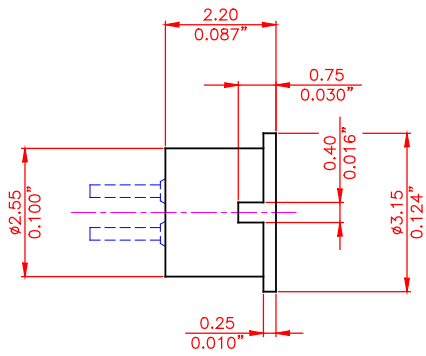
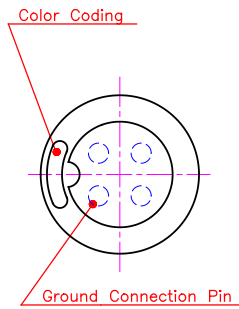
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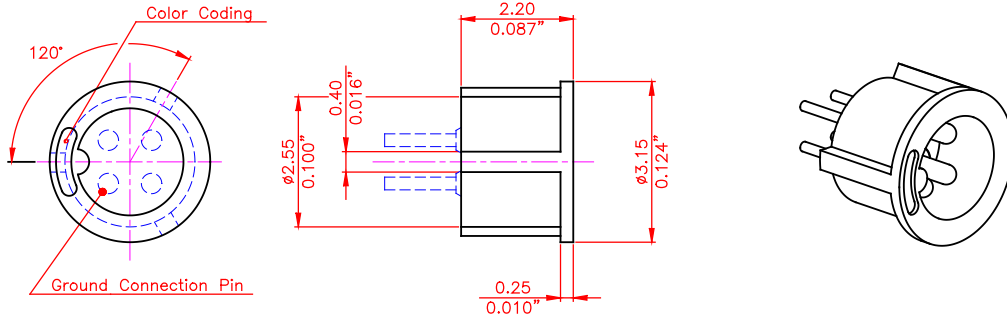
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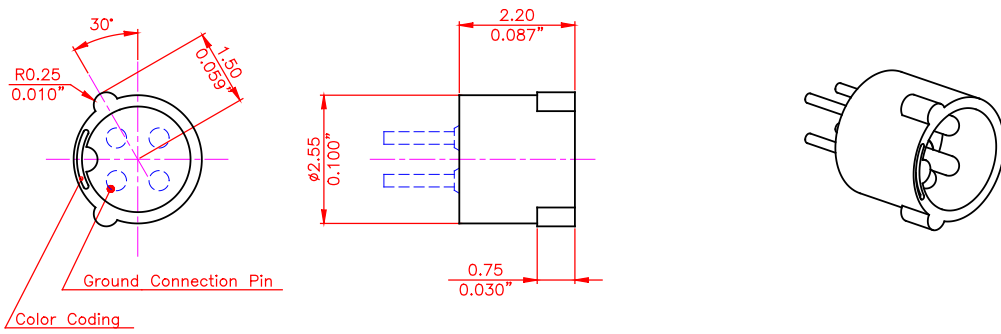
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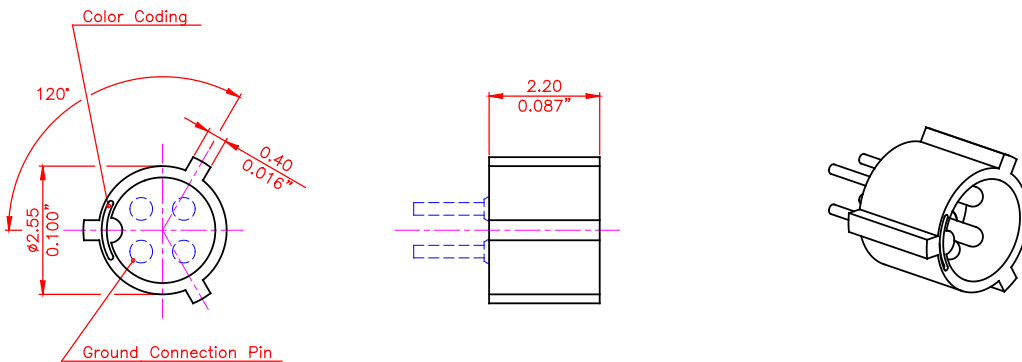
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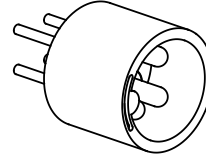
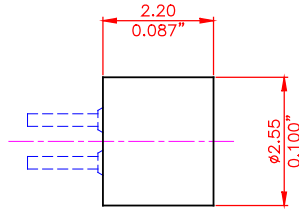
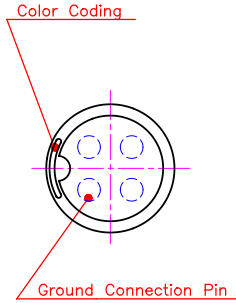
CS 44 No. 07



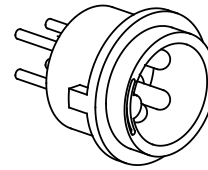
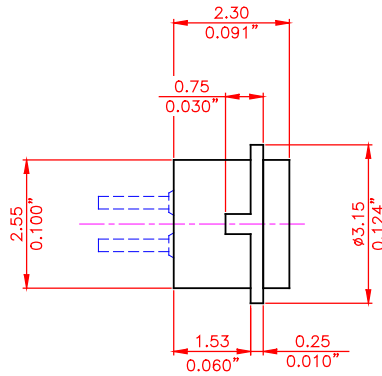
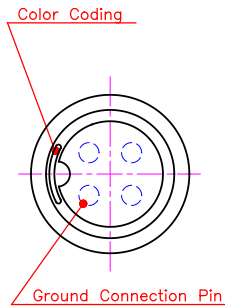
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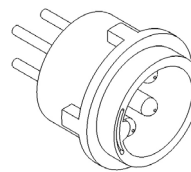
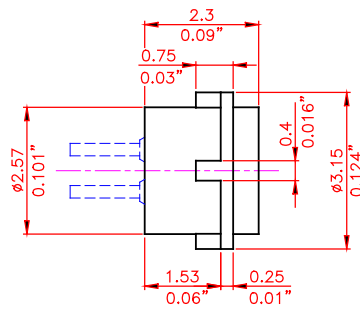
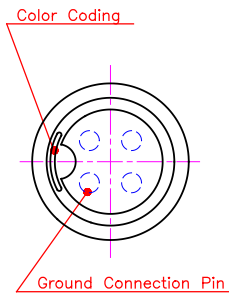
CS 44 No. 09



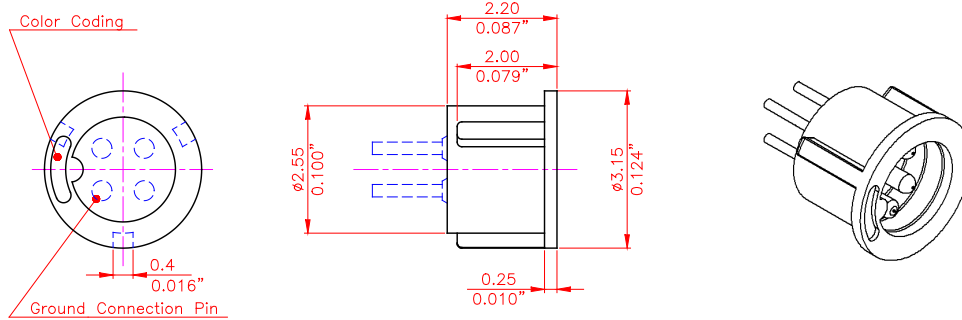
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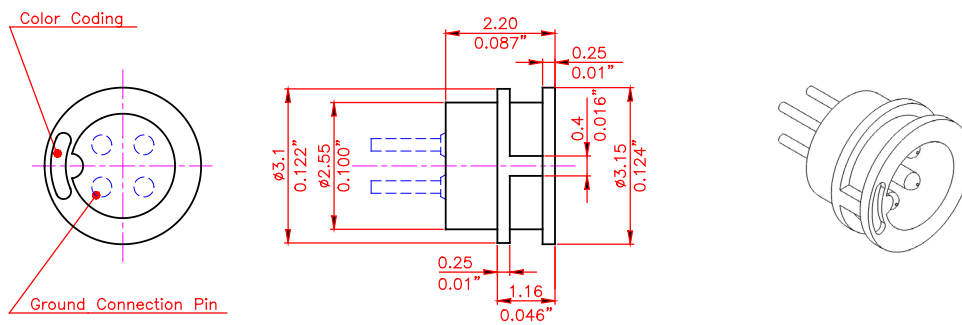
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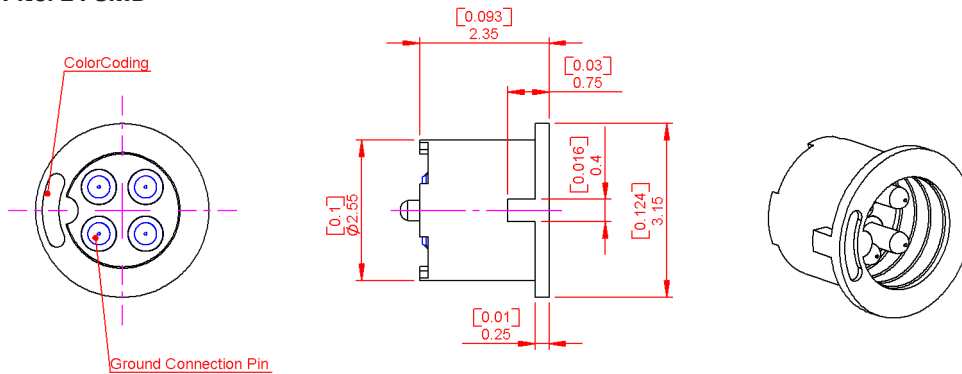
CS 44 No. 16



CS 44 No. 17

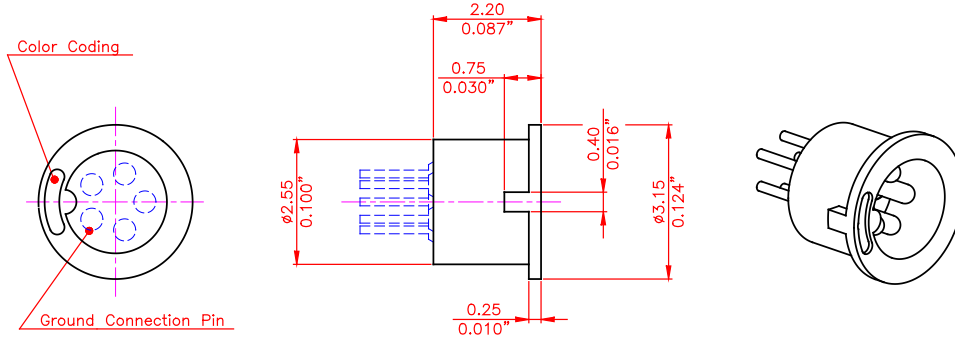


CS 44 No. 24 SMD

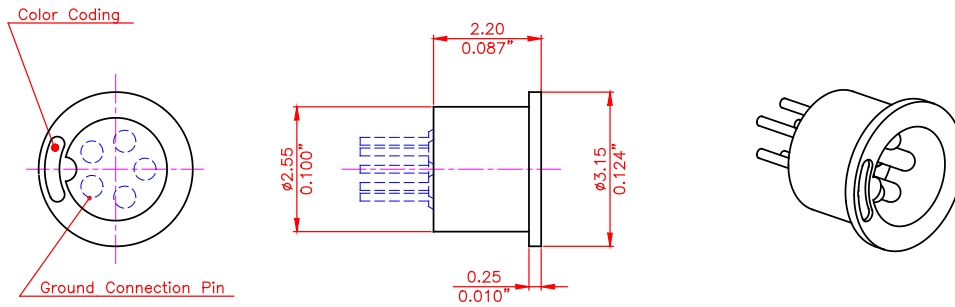


For socket CS 44 No. 24 SMD, color 700, uncolored PEEK is used.

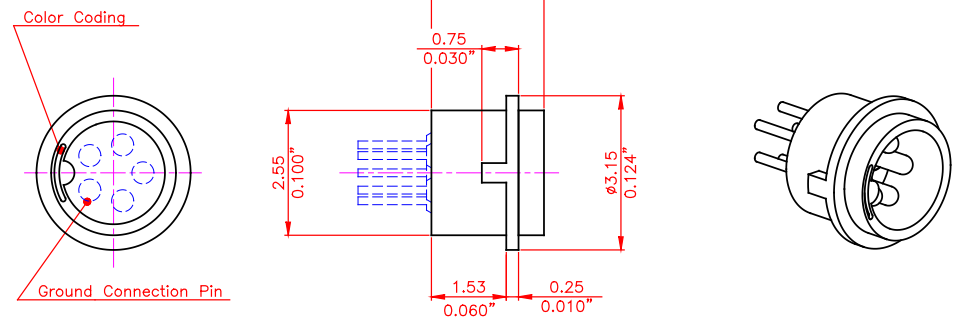
CS 45 No. 01



CS 45 No. 02

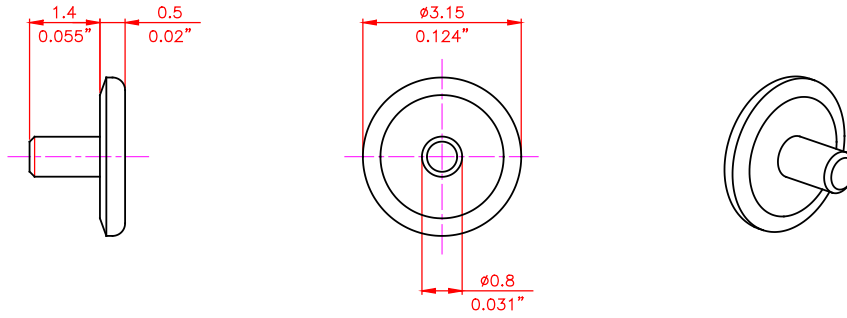


CS 45 No. 03

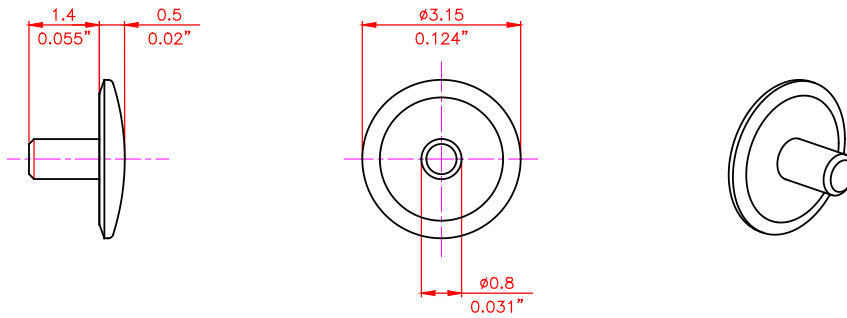


Socket Cover Styles

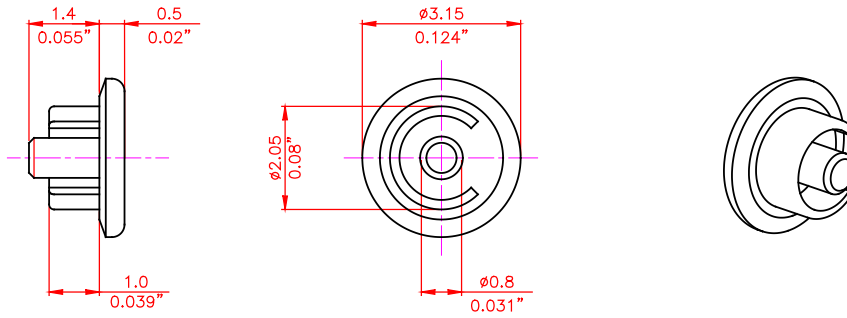
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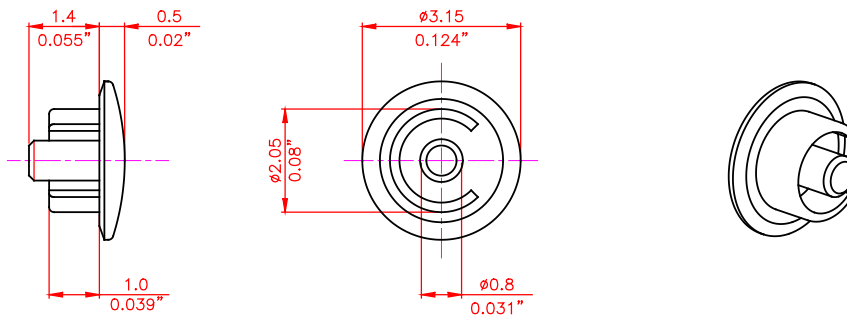
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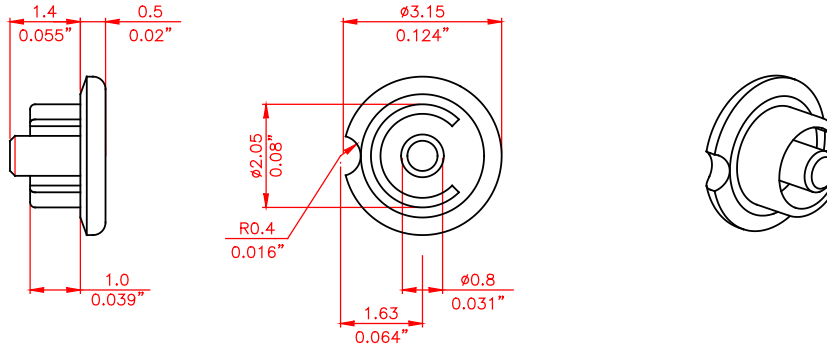
No. 04



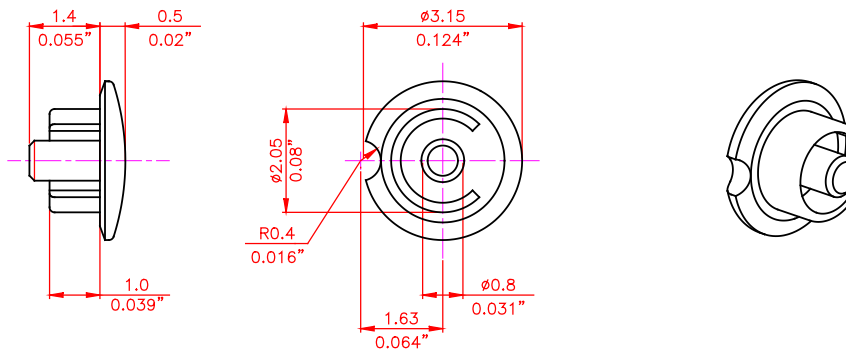
No. 05



No. 07



No. 09



Plastic Colors

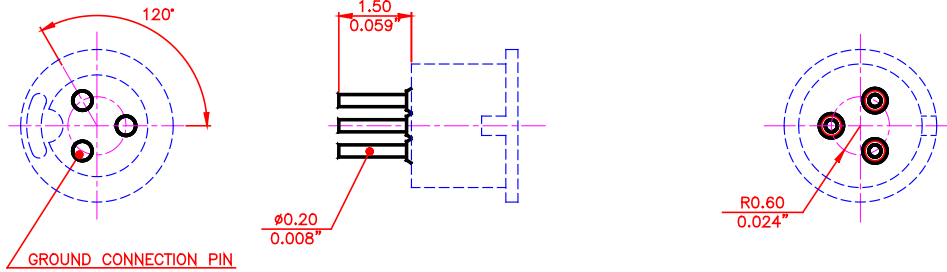
Please refer to series 100 included in the Sonion 'Plastic Color Assortment' binder.
For socket CS 44 No. 24 SMD, color 700, uncolored PEEK is used.

Terminal lengths

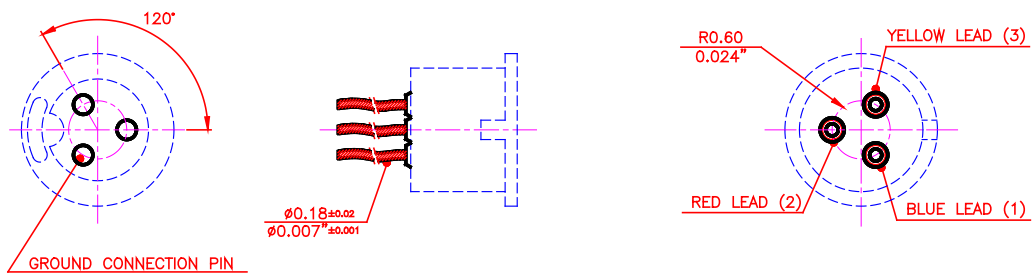
Pre-tinning length: 0.8 mm +0,30 / - 0,20
Tolerance on flexible terminal length: -0, +2 mm
Tolerance on rigid terminal length: ±0.05

Type	Length (mm)	Length (inch)
SMD	N/A	N/A
Rigid	1.5	0.06"
Uninsulated Flexible	5-10-15 20-25-30	0.2"-0.4"-0.6" 0.8"-1.0"-1.2"
Insulated Flexible	5-10-15 20-25-30	0.2"-0.4"-0.6" 0.8"-1.0"-1.2"
Reinforcement of back of socket	Available for flexible terminals only. Improves robustness, mechanical and electrical reliability.	

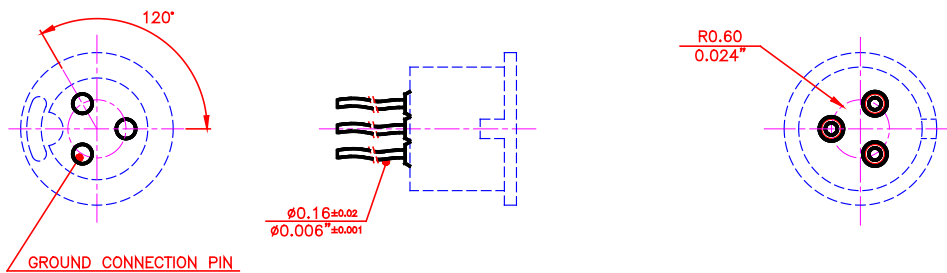
CS 43 - Rigid 1.5 mm



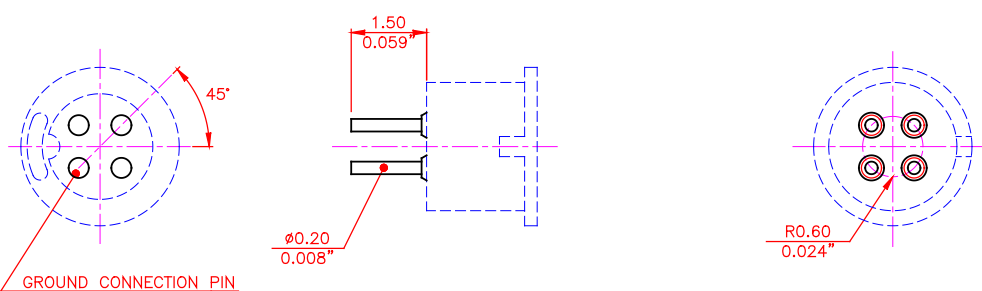
CS 43 - Flexible Insulated



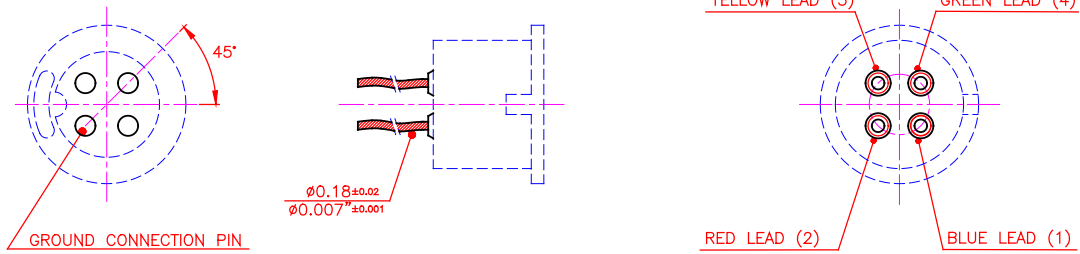
CS 43 - Flexible Uninsulated



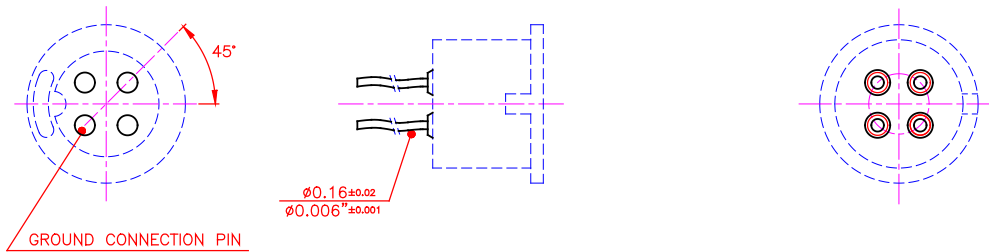
CS 44 - Rigid 1.5 mm



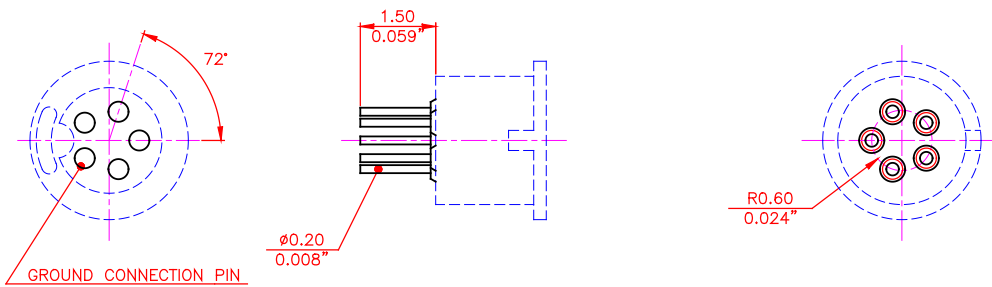
CS 44 - Flexible Insulated



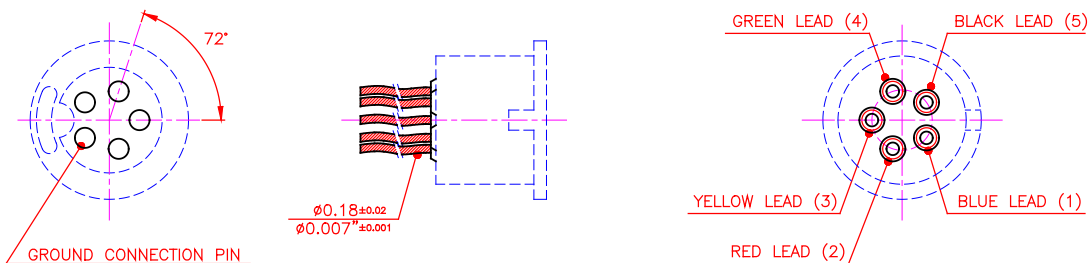
CS 44 - Flexible Uninsulated



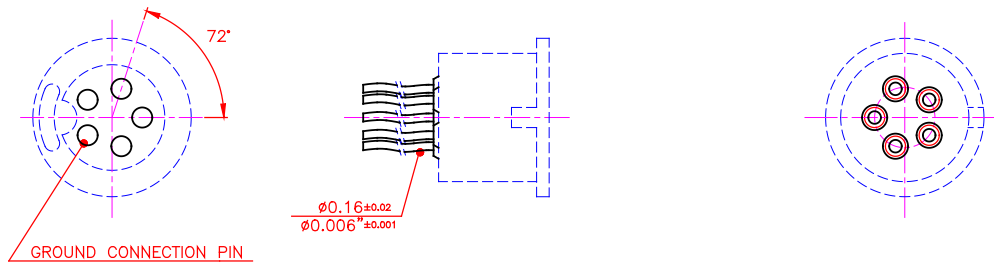
CS 45 - Rigid 1.5 mm



CS 45 - Flexible Insulated



CS 45 - Flexible Uninsulated

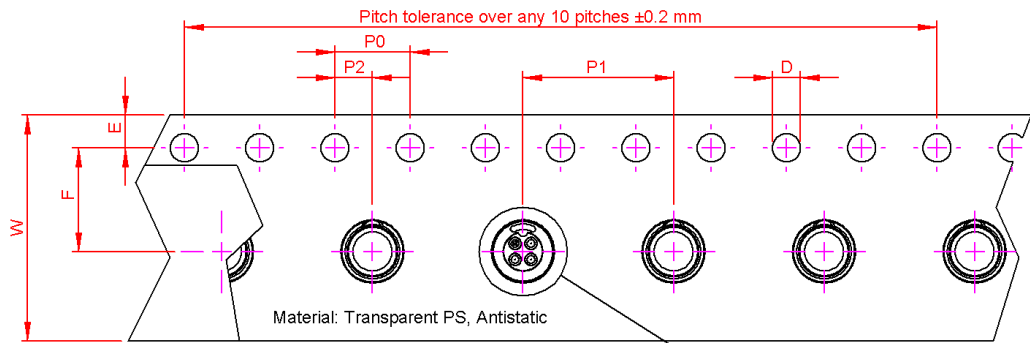
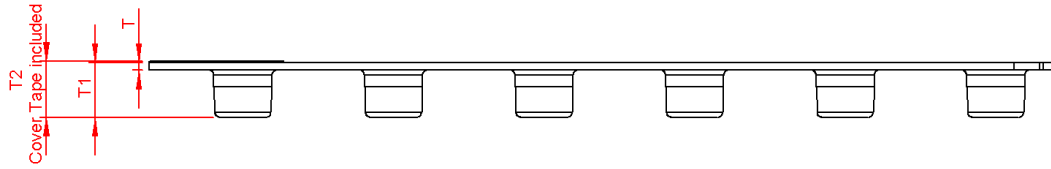


Color Coding

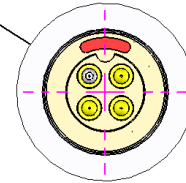
Please see colors for coding in the Sonion 'Plastic Color Assortment' binder or in the Product Overview.

For information concerning position and shape of the color coding area, please see the drawings of the individual sockets in this data sheet.

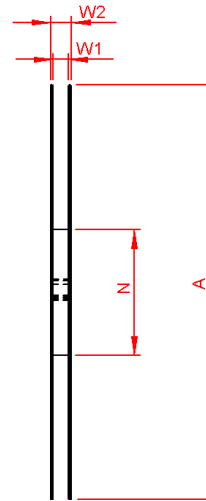
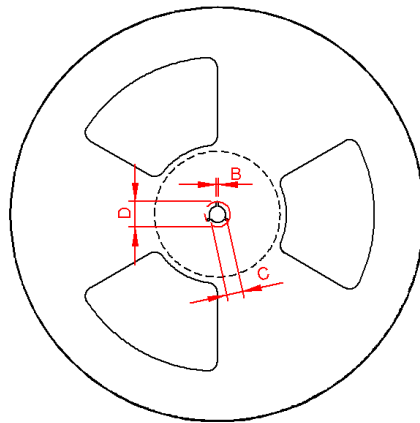
SMD Packaging



Dimensions			
W	12.0 ±0.3 / 0.472" ±0.012	P2	2.0 ±0.1 / 0.079" ±0.004
E	1.75 ±0.1 / 0.069" ±0.04	D	Ø1.5 ±0.1 / 0.069" ±0.004
F	5.5 ±0.1 / 0.217" ±0.004	T	0.4 ±0.05 / 0.016" ±0.002
P	4.0 ±0.1 / 0.157" ±0.004	T1	2.9 ±0.1 / 0.114" ±0.004
P1	8.0 ±0.1 / 0.315" ±0.004	T2	2.97 ±0.15 / 0.117" ±0.006



Orientation of socket



W1	W2	A	N	B	C	D	# per Reel
12.4 +2/0	18.4 max.	330 max.	100 ±2	1.5 min.	Ø13 ±0.25	Ø20.2 min.	3000 max

Product Specification Form

Name: _____

Company: _____

Customer Part No.: _____

Parameters	Look at Page	Enter your choices	Guidelines
Model	1		Please enter CS 43, 44 or 45
Back reinforcement	7		Sonion recommends back reinforcement. Please enter yes or no. For flexible terminals only
Socket Style	7-14		
Socket Cover Style	15-16		
Plastic Color	16		Please refer to series 100 included in the Sonion 'Plastic Color Assortment' binder. For Socket CS 44 No. 24 SMD, color 700 is used
Terminal Styles	17-19		Please enter style and length. For SMD only housing style CS 43 No. 23 or CS 44 No. 24
Color Coding	19		Please see colors for coding included in the Sonion 'Plastic Color Assortment' binder