Technology to Inspire Innovation

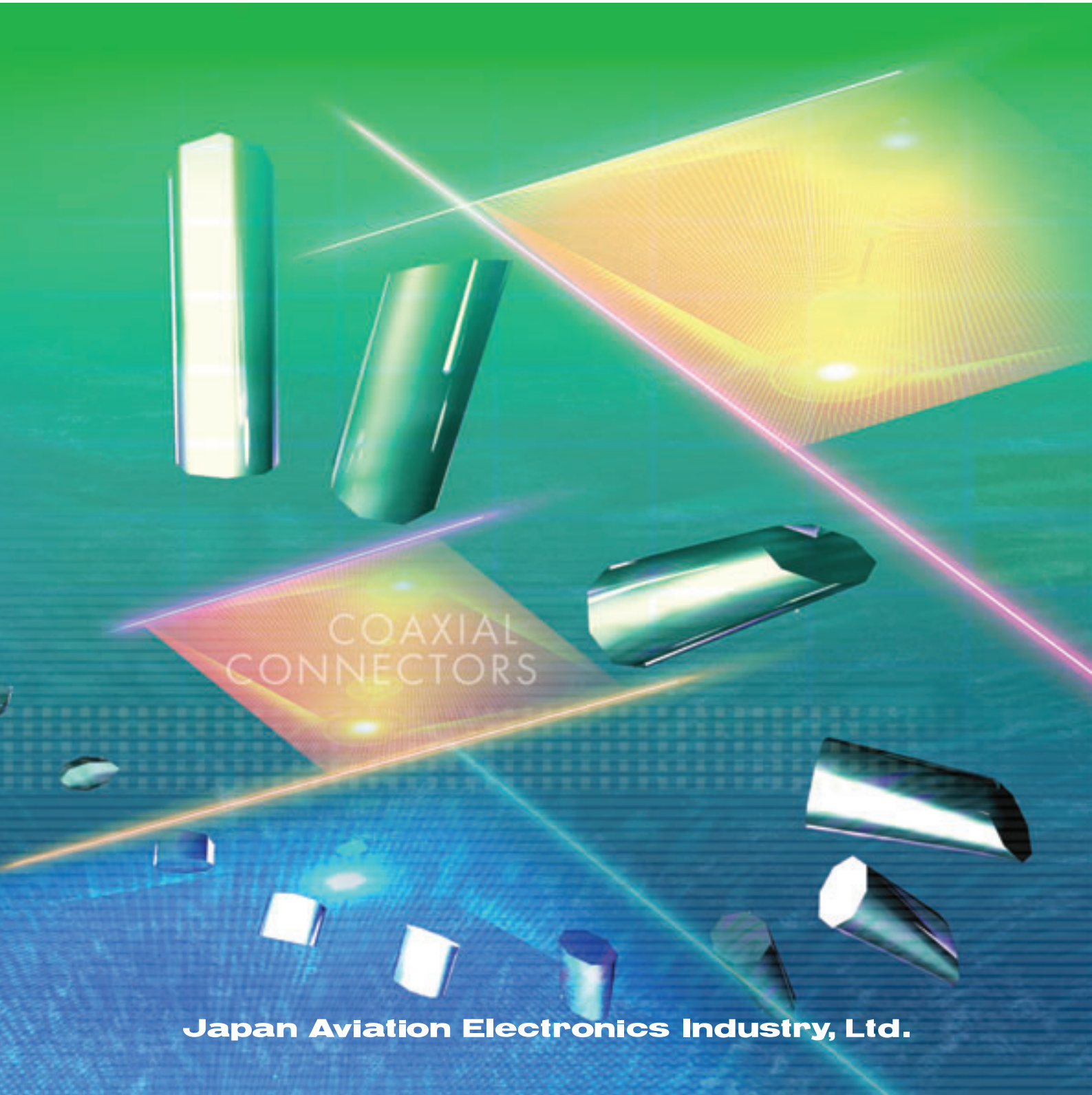
JAE

RoHS Compliant

COAXIAL CONNECTORS

2008

CAT.NO.COAX-007A-E.FEB.2008



Japan Aviation Electronics Industry, Ltd.

JAE
COAXIAL CONNECTORS

In recent years advances have made in digitalization, increased speed and frequency for various types of electronic equipment. At the same time in the field of information communication, innovations are being pursued in coaxial transmission circuit technology for high frequencies.

JAE has a foundation of solid business achievements in the high performance technology of equipment for aerospace and aeronautical use , as well as connection technology spanning a broad range of fields. We can deliver coaxial connectors that link coaxial transmission lines applicable to high frequencies in an age of high-level information communication for top performance and reliability. JAE coaxial connectors are being used more and more in an ever-widening range of electronic equipment for all kinds of information communication electronic equipment, in everything from wireless and cable communication devices, electronic measuring instruments, and broadcast equipment.

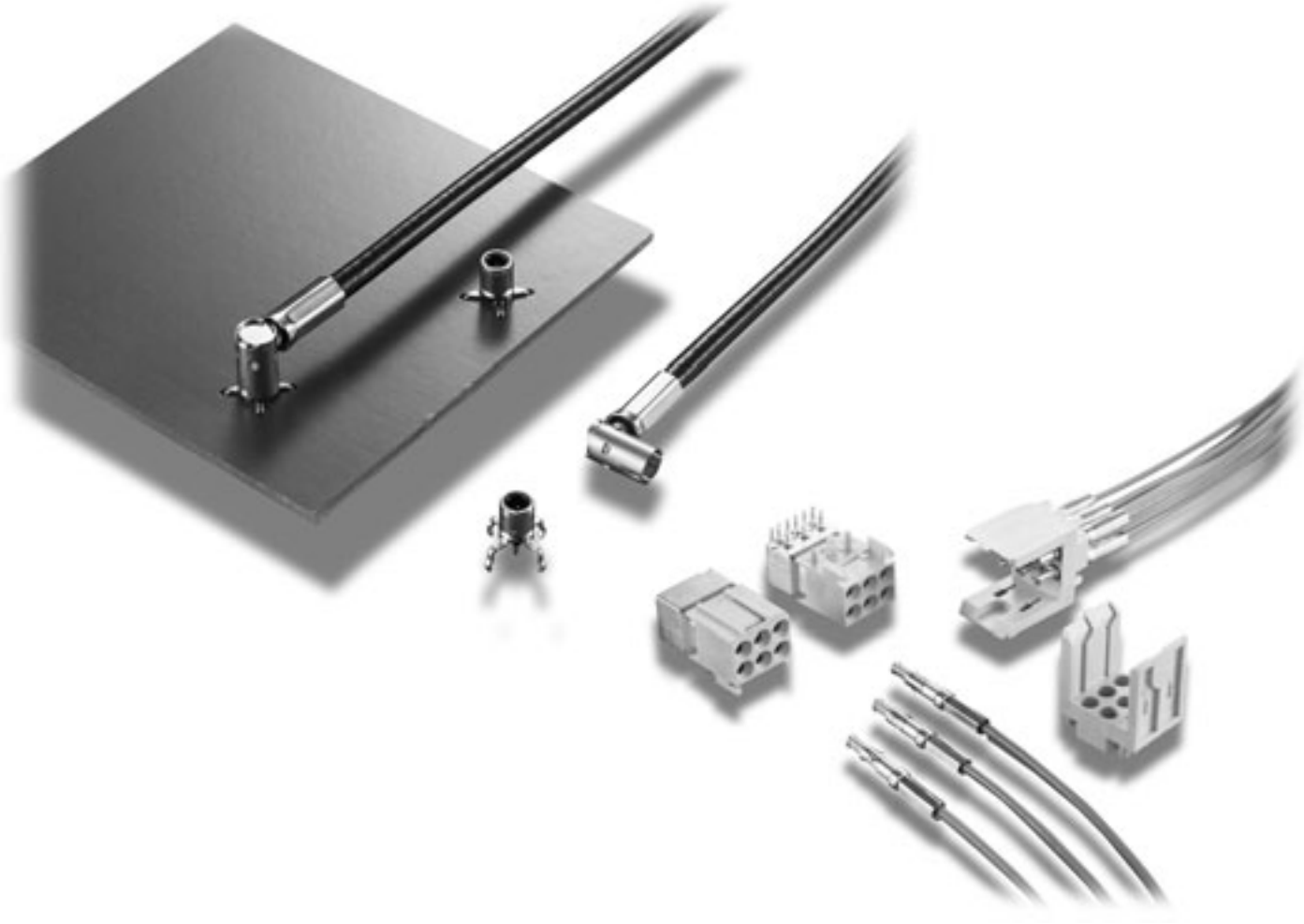
We manufacturer products other than those listed this catalog. We also welcome requests from customers for new product development, so please do not hesitate to contact us.

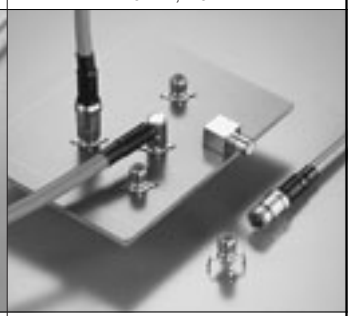
Type		General Purpose Standard Connectors		
Series Prefix		**SMA**	**SMB**	**CN50**
Characteristic Impedance		50Ω	50Ω	50Ω
Frequency Range		DC to 18GHz 〔Straight Adapter〕	DC to 3GHz	DC to 3GHz
Coupling Style		Threaded	Push-on	Push-on
Applicable Cables		1.5D-V, 1.5D-W, 2.5D-V, UT141, UT85	1.5D-V, 1.5D-W, UT85	1.5D-V
Appearance				
D. W. Voltage		500 VAC rms (1 minute)	500 VAC rms (1 minute)	500 VAC rms (1 minute)
Insulation Resistance		500 megohms min.	500 megohms min.	500 megohms min.
Contact Resistance	Center Contact	4 milliohms max.	5 milliohms max. 8 milliohms max. (SMBS001D00)	15 milliohms max.
	Outer Contact	4 milliohms max.	2.5 milliohms max. 12 milliohms max. (SMBS001D00)	8 milliohms max.
V.S.W.R.		1.2 max. (DC to 3GHz)	1.2 max. (DC to 3GHz)	1.2 max. (DC to 3GHz)
Conformable Spc.		IEC60169-15	IEC60169-10	IEC60169-10 (Type SMB) compatible
Page		9 to 18	19 to 24	25 to 26

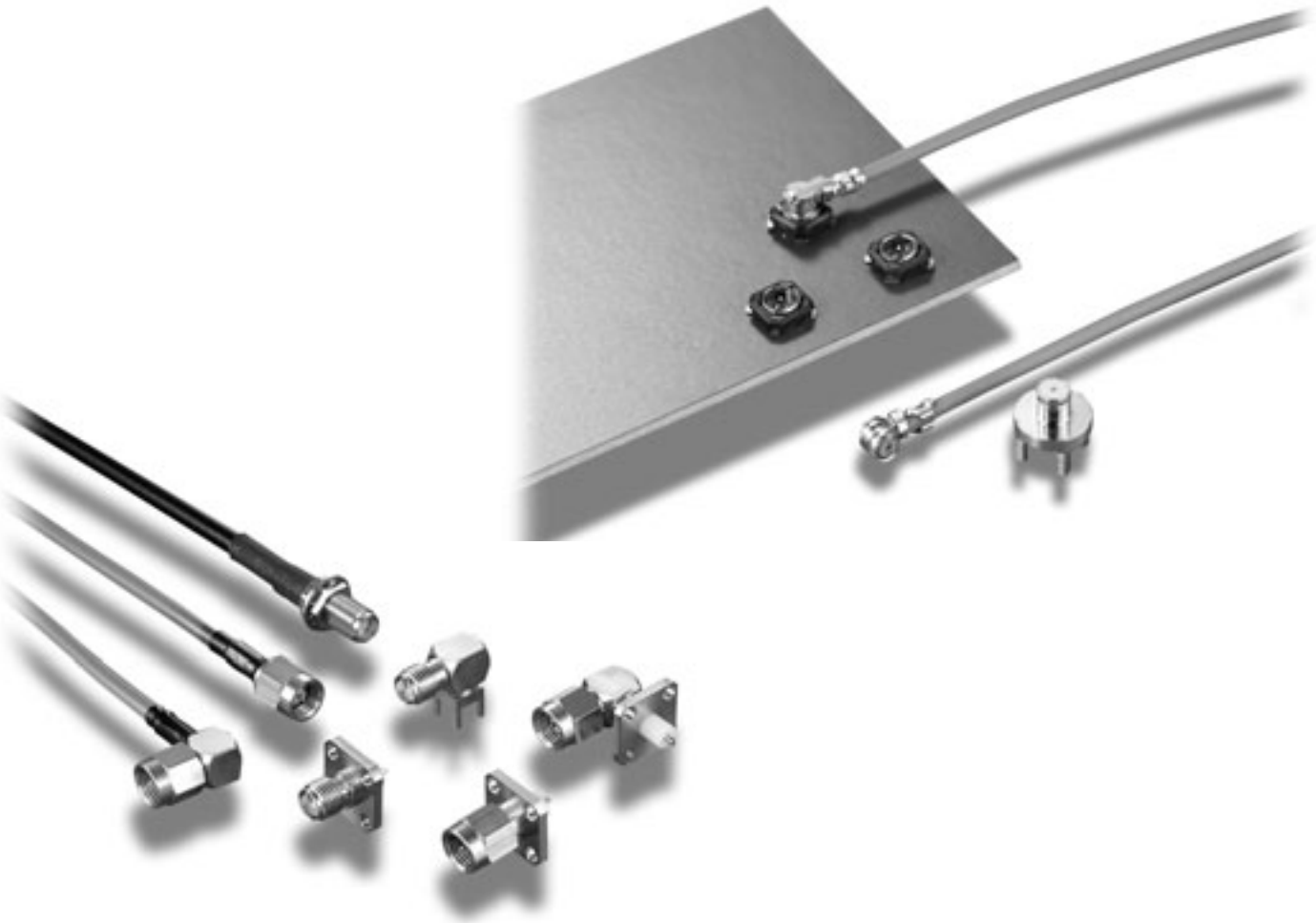
JAE has been awarded the certificate of ISO9001 (quality management system) and ISO14001 (environmental management system).

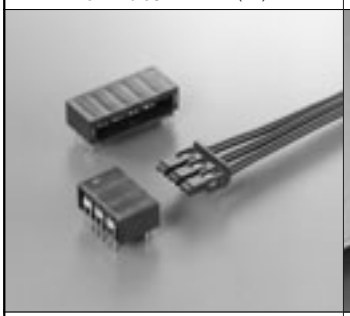
Contents

General Purpose Standard Connectors			
BNC	**TNC**	**N**	**716**
50Ω/75Ω	50Ω	50Ω	50Ω
50Ω : DC to 3GHz 75Ω : DC to 1.5GHz	DC to 3GHz	DC to 3GHz	DC to 3GHz
Bayonet Lock	Threaded	Threaded	Threaded
0.8C-V, 1.5C-V, 1.5C-W, 1.5D-V, 1.5D-W, 2.5D-V, 3C-V	1.5D-V, 1.5D-W, 2.5D-V, UT85	1.5D-V, 1.5D-W, 2.5D-V, 5D-V, UT141, UT85	2.5D-V
			
500 VAC rms (1 minute)	500 VAC rms (1 minute)	500 VAC rms (1 minute)	3000 VAC rms (1 minute)
500 megohms min.	500 megohms min.	500 megohms min.	10 gigaohms min.
10 milliohms max.	10 milliohms max.	10 milliohms max.	0.8 milliohms max.
5 milliohms max.	10 milliohms max.	10 milliohms max.	1.5 milliohms max.
1.2 max.	1.2 max. (DC to 3GHz)	1.2 max. (DC to 3GHz)	1.2 max. (DC to 3GHz)
IEC-60169-8	IEC60169-17	IEC60169-16	IEC60169-4
27 to 34	35 to 41	43 to 49	51 to 52



Type		JAE Original Connectors		
Series Prefix		**CA1**	**CF2**	**CN10**
Characteristic Impedance		50Ω	50Ω	50Ω
Frequency Range		DC to 6GHz	DC to 6GHz	DC to 3GHz
Coupling Style		Push-on	Plug-in	Push-on
Applicable Cables		1.5D-V, 1.5D-W, 2.5D-V, UT141, UT85	1.5D-V, 1.5D-W, UT141, UT85	0.8D-W, 1.5D-V, 1.5D-W, 2.5D-V
Appearance				
D. W. Voltage		500 VAC rms (1 minute)	500 VAC rms (1 minute)	200 VAC rms (1 minute)
Insulation Resistance		1000 megohms min.	500 megohms min.	500 megohms min.
Contact Resistance	Center Contact	4 milliohms max.	8 milliohms max.	8 milliohms max.
	Outer Contact	4 milliohms max.	8 milliohms max.	8 milliohms max.
V.S.W.R.		1.2 max. (DC to 3GHz)	1.2 max. (DC to 3GHz)	1.2 max. (DC to 3GHz)
Page		53 to 56	57 to 61	63 to 66



JAE Original Connectors			
KD10/KD20	**CV10**	**CJ2**	**CJ3**
50Ω/75Ω	50Ω	50Ω	50Ω
DC to 300MHz	DC to 3GHz	DC to 3GHz	DC to 3GHz
Push-on	Push-on	Plug-in	Plug-in
50Ω : 0.8D-IEV(LF) or CO-6F-SB-CX50 75Ω : 0.8CV-E41447(LF)	0.8D EQUIVALENT (SPECIAL)	0.8D-W, UT85	1.5D-V, 1.5D-W
			
250 VAC rms (1 minute)	500 VAC rms (1 minute)	500 VAC rms (1 minute)	500 VAC rms (1 minute)
100 megohms min.	500 megohms min.	1000 megohms min.	1000 megohms min.
80 milliohms max.	30 milliohms max.	50 milliohms max.	10 milliohms max.
30 milliohms max.	15 milliohms max.	20 milliohms max.	10 milliohms max.
1.3 max. (DC to 300MHz)	1.3 max. (DC to 3GHz)	1.3 max. (DC to 3GHz)	1.2 max. (DC to 3GHz)
67 to 69	71 to 74	75 to 78	79 to 89

Type		JAE Original Connectors
Series Prefix		**CJ4**
Characteristic Impedance		50 Ω
Frequency Range		DC to 3GHz
Coupling Style		Plug-in
Applicable Cables		1.5D-V, 1.5D-W, UT85
Appearance		
D. W. Voltage		500 VAC rms (1 minute)
Insulation Resistance		500 megohms min.
Contact Resistance	Center Contact	10 milliohms max.
	Outer Contact	10 milliohms max.
V.S.W.R.		1.2 max. (DC to 3GHz)
Page		91 to 92

《Reference》

■Applicable cable type / Description

Cable Type	Standard outer diameter of insulator (approx.)	Standard outer diameter	Characteristic Impedance	Insulator	Specification of outer conductor	product name of Cable maker (examples)
Flexible	0.8 (mm) 1.5 (mm) 2.5 (mm) 3 (mm) 5 (mm) 10 (mm)	—	D : 50Ω C : 75Ω	2 : Filled Polyethylene (Note)	V : Single Braid	0.8D-IEV(LF) 1.5D-QEV 1.5D-GXC-SP 1.5D-HQ・SUPER 2.5D-GXC 2.5D-QEV etc.
					W : Double Braid	1.5D-QEW etc.
Semi-flexible	—	0.085 (inch) 0.141 (inch)	50Ω	—	—	FCCA1 FCCAP0
Semi-rigid	—	0.085 (inch) 0.141 (inch)	50Ω	—	—	VSC-086D VSC-141D

(Note) Except 1.5D-GXC-SP, 1.5D-HQ・SUPER, 2.5D-GXC cables. (foamed polyethylene or foamed polyolefin)

(Example) $\frac{1.5}{①}\ \frac{D}{②}$ — $\frac{2}{③}\ \frac{V}{④}$ (equivalent)

①Standard outer diameter of insulator (approx.)	: 1.5mm
②Characteristic Impedance	: 50Ω
③Insulator	: Filled Polyethylene
④Specification of outer conductor	: Single Braid

Before placing an order

①The values specified in this catalogue are only for reference. The products and specifications are subject to change without notice. Contact our sales staff for further information before considering or ordering any of our products. For purchase, a product specification must be agreed upon.
②Users are requested to provide protection circuits and redundancy circuits to ensure safety of the equipment, and sufficiently review the suitability of JAE's products to the equipment.
③The products presented in this catalogue are designed for the uses recommended below.
We strongly suggest you contact our sales staff when considering use of any of the products in any other way than the recommended applications or for a specific use that requires an extremely high reliability.

(1)Applications that require consultation:

(i)Please contact us if you are considering use involving a quality assurance program that you specify or that is peculiar to the industry, such as:
Automotive electrical components, train control, telecommunications devices (mainline), traffic light control, electric power, combustion control, fire prevention or security systems, disaster prevention equipment, etc.

(ii)We may separately give you our support with a quality assurance program that you specify, when you think of a use such as:
Aviation or space equipment, submarine repeaters, nuclear power control systems, medical equipment for life support, etc.

(2)Recommended applications include:

Computers, office appliances, telecommunications devices (terminals, mobile units), measuring equipment, audiovisual equipment, home electric appliances, factory automation equipment, etc.

COAXIAL
CONNECTORS

Japan Aviation Electronics Industry, Limited

1-19, Aobadai 3-chome, Meguro-ku, Tokyo 153-8539, Japan
Telephone: (81) 3-3780-2768 Facsimile: (81) 3-3780-2883

http://www.jae.com
http://www.jae-connector.com

JAE Electronics, Inc.
142 Technology Drive, Suite 100 Irvine, California 92618-2430, U.S.A.
Telephone: (1) 949-753-2600 Facsimile: (1) 949-753-2699
(800) JAE-PART (523-7278) Toll free in U.S.A. except in California and Alaska

---

JAE Europe, Ltd.
Coliseum Business Center, Riverside Way, Camberley, Surrey GU15 3YL, U.K.
Telephone: (44) 1276-404000 Facsimile: (44) 1276-404010

JAE Taiwan, Ltd. <Taipei Branch Office>
4F-1, No.88, Sec.2, Chung Hsiao E.Rd., Taipei, Taiwan, R.O.C.
Telephone: (886) 2-2396-7676 Facsimile: (886) 2-2392-5929

JAE Hong Kong, Ltd.
Suites 1407-11,14/F., Tower2, The Gateway, 25 Canton Road,
Tsimshatsui, Kowloon, Hong Kong
Telephone: (852) 2723-7782 Facsimile: (852) 2723-9028

JAE Shanghai Co., Ltd.
RM1407, Shanghai Mart 2299 Yanan Road (West) Shanghai, 200336 P.R.C.
Telephone: (86) 21-6236-0322 Facsimile: (86) 21-6236-1292

JAE Singapore Pte Ltd.
33 Tannery Lane, #02-01 Hoesteel Industrial Building, Singapore 347789
Telephone: (65) 6748-1332 Facsimile: (65) 6748-2920

JAE Korea, Inc.
1602, City Air Tower, 159-9, Samsung-dong, Gangnam-gu, Seoul, 135-973 Korea
Telephone: (82) 2-551-8959 Facsimile: (82) 2-551-8958
