



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

Tel: +86-755-8981 8866 Fax: +86-755-8427 6832

Email & Skype: info@chipsmall.com Web: www.chipsmall.com

Address: A1208, Overseas Decoration Building, #122 Zhenhua RD., Futian, Shenzhen, China



NEW


Interface connector conforming to InfiniBand Standard

CONNECTOR

DG1 Series

MB-0097-2

July 2006

RoHS Compliant

This product is a high-speed signal connector for balance transmission compliant to high-speed serial signal transmission of servers, routers, switches, external storage and more.

Features

- Connector conforming to IBTA (InfiniBand Trade Association) Copper Cable Standard 4x, 12x.
- Receptacle with wide nozzle area for automatic mounting.
- One-touch clip used for panel installation to receptacle (compatible with panel thickness 1.0mm and 0.8mm).
- Shield cover for EMI prevention available for 12x receptacle.
- 2-step lock spring (lanyard) used for secure locking and release of mated plug and receptacle.
- Collaborative development of cable harness with GORE from U.S.A. proceeds. A plug connector will be provided with cable harness. Please contact us for further information.

Applications

Servers, Storages, Routers, Switches and Others

General Specifications

- | | |
|---|---|
| ■ No. of contacts
<4x>: signal 8 pair 25 pos.
<12x>: signal 24 pair 73 pos. | ■ Rated Current: 0.5A |
| ■ Contact resistance: Initial 80m ohm max.
(20m ohm max. after test) | ■ Insulation resistance: 1000M ohm min. |
| ■ Dielectric withstanding voltage:
DC500V (per minute) | ■ Life time: 250 times |
| ■ Operating temperature:
-25 to +70 Deg. C | ■ Impedance: 100 ohm +/-10%(peak) |
| ■ Insertion/ Withdrawal force:
Insertion force <4x>/ 56N max.
<12x>/ 73N max.
Withdrawal force <4x>/ 49N max.
<12x>/ 59N max. | ■ Crosstalk: Near-end 4% max. |

■ DG1 Series



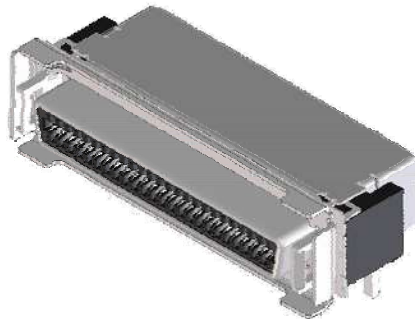
DG1R025HS*
(4x Receptacle)

Clip for panel installation attached



DG1R073HS*
(12x Receptacle)

Clip for panel installation attached



12x Receptacle
EMI countermeasure and
Clip for panel installation attached

Cable Harness (for reference)



DG1P025SL****R**
(4x Harness on both ends)



DG1P073SL****R**
(12x Harness on both ends)

Materials and Finishes

■ Receptacle (DG1R025HS*, DG1R073HS*)

Components	Materials/Finishes
Insulator	Glass filled LCP/ Color: Black(UL94V-0)
Shell	Steel/ Nickel plating
Signal contact	Copper alloy/ Contact area: Au plating over Ni (0.76um min.)
Ground contact	Terminal area: (S) Sn plating
Lock plate	Steel/ Tin plating
Gasket	Stainless steel

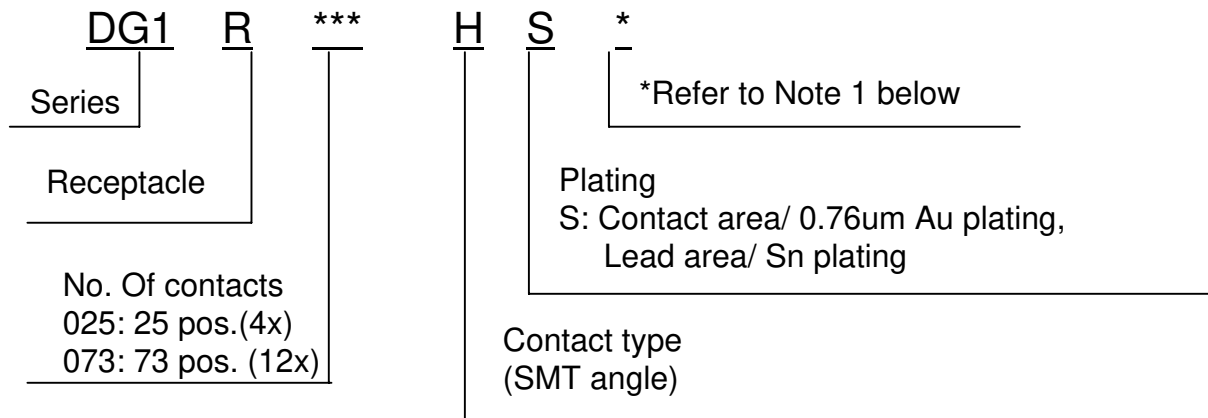
Using Cable Harness

■ Plug (DG1P025****, DG1P073****)

Components	Materials/Finishes
Backshell	Zinc/ Nickel plating
Lock spring	Stainless steel
Lanyard	Polycarbonate(UL94V-0)
Screw	Steel/ Nickel plating
Insulator	Glass filled LCP/ Color: Black(UL94V-0)
Signal contact	Copper alloy/ Au plating over nickel (0.76um min.)
Ground contact	Copper alloy/ Au plating over nickel (0.76um min.)
Paddle card	FR-4
Cable clamp	Copper alloy/ Nickel plating
Ring	Copper alloy/ Nickel plating

Ordering Information

-Angle receptacle



*Note 1

Products	Mold boss	Metal boss height: Xdimension(mm)
DG1R***HS1	No	2.325
DG1R***HS2	No	3.125
DG1R***HS3	No	4.8
DG1R***HS4	Location post	2.325
DG1R***HS5	Location post	3.125
DG1R***HS6	Location post	4.8
DG1R***HS7	Crush pin	2.325
DG1R***HS8	Crush pin	3.125
DG1R***HS9	Crush pin	4.8

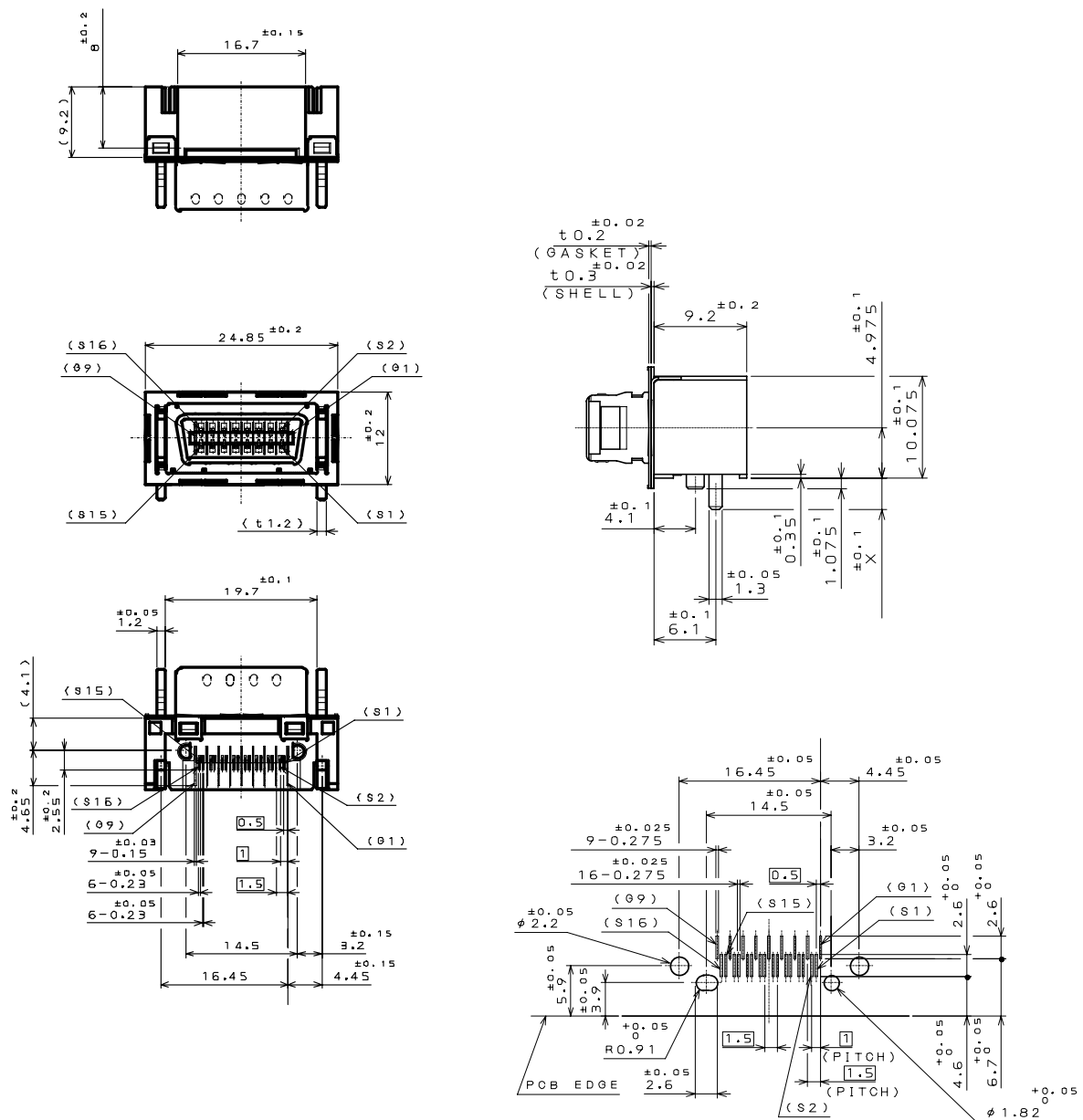
-Cable Harness

Series	DG1	P ***	S	**	L ****	R	RoHS Compliant
Plug	025: 4x 073: 12x						Cable length(cm): 0100:100cm 0300:300cm 0500:500cm 1000:1000cm
Connection	S: Soldering						Cable size: 24: AWG#24 26: AWG#26 28: AWG#28

Dimensions and Design

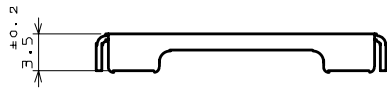
■ Receptacle

<4x>
-DG1R025HS**

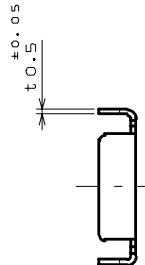
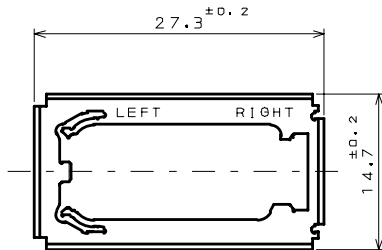


APPLICABLE P.C.B. DIMENSION(REF.)

-D029-50198 (Clip for panel installation)

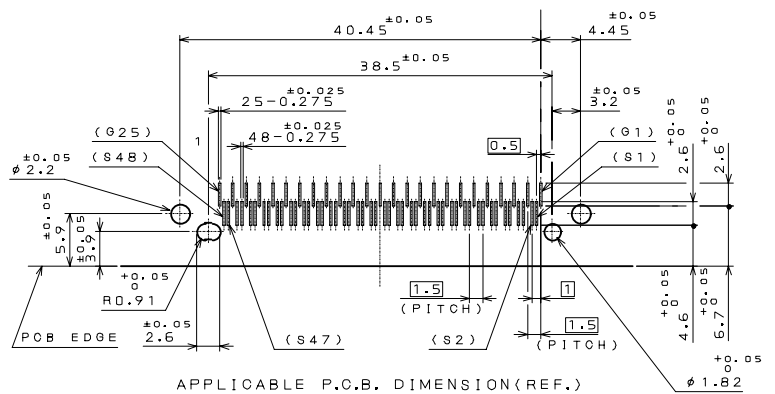
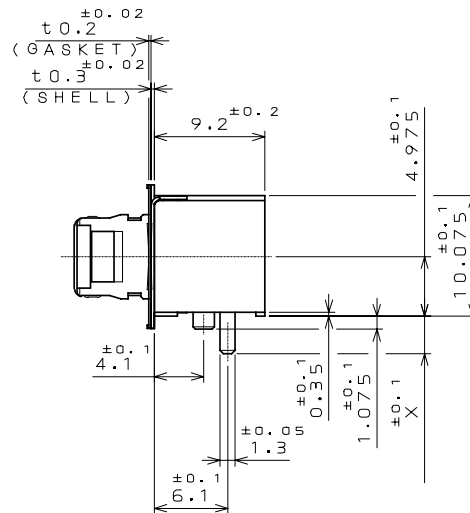
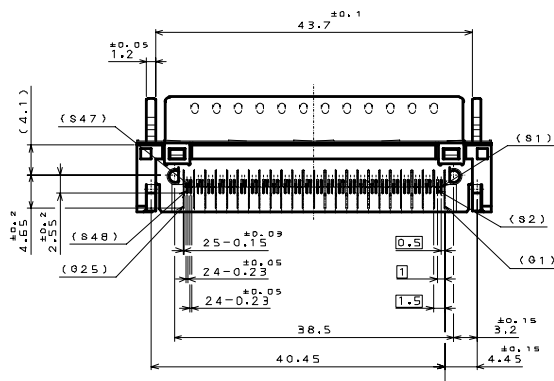
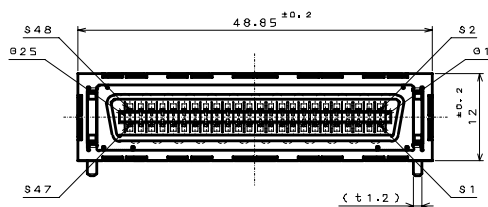
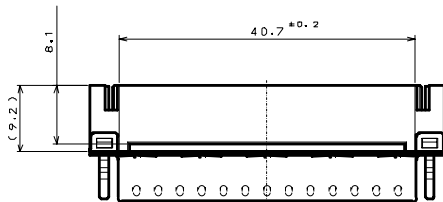


Compliant with 1.0mm-thick panel
InfiniBand Standard

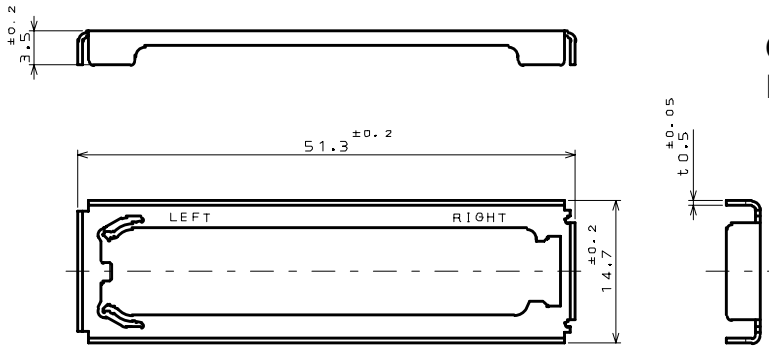


<12x>

-DG1R073HS**

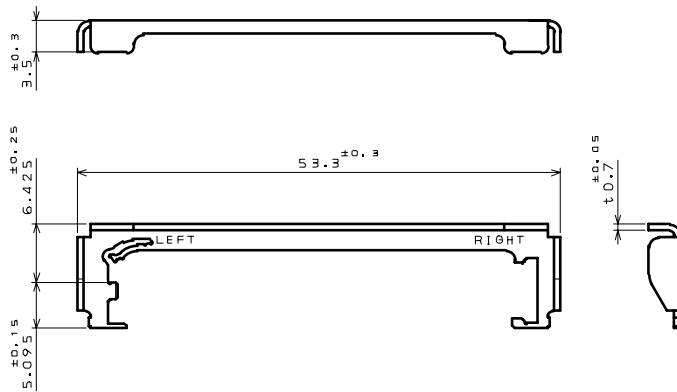


-D029-50197 (Clip for panel installation)



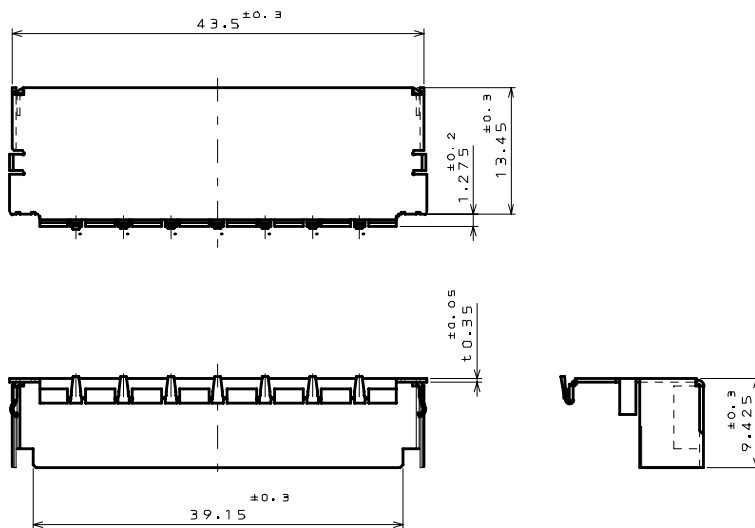
Compliant with 1.0mm-thick panel
InfiniBand Standard

-D029-50199 (Clip for PCI panel installation)



Compliant with 0.8mm-thick panel
PCI Standard

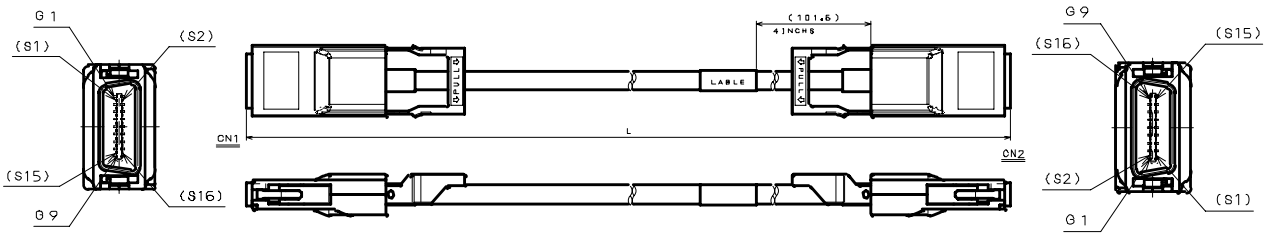
-D283-50016R (Shield cover for EMI)



EMI shield compliant only with
12x, at present.

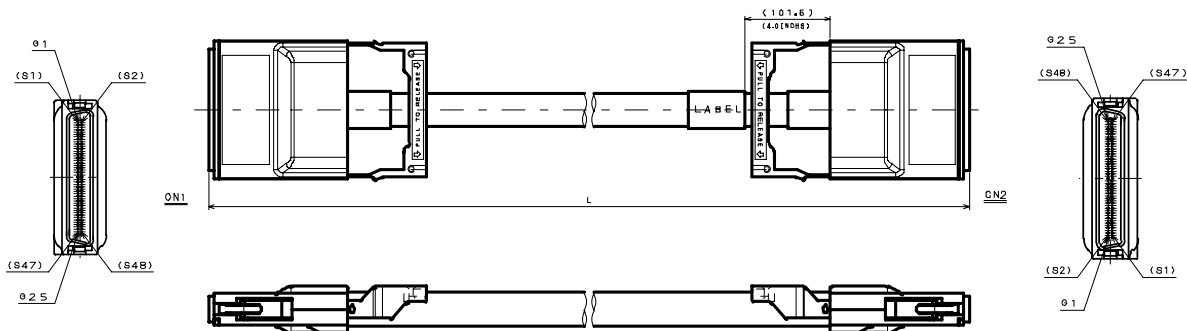
■ Cable Assembly

• 4x Harness



Applicable Cable	L Dimensions	Part Number
AWG#24	1m	DG1P025S24L0100R
	3m	DG1P025S24L0300R
	5m	DG1P025S24L0500R
	10m	DG1P025S24L1000R
AWG#26	1m	DG1P025S26L0100R
	3m	DG1P025S26L0300R
	5m	DG1P025S26L0500R
	10m	DG1P025S26L1000R
AWG#28	1m	DG1P025S28L0100R
	3m	DG1P025S28L0300R
	5m	DG1P025S28L0500R
	10m	DG1P025S28L1000R

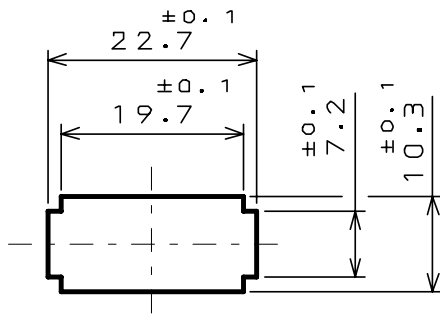
• 12x Harness



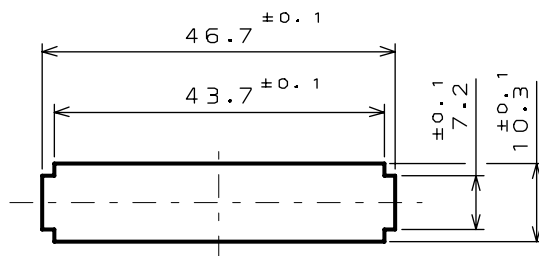
Applicable Cable	L Dimensions	Part Number
AWG#26	1m	DG1P073S26L0100R
	3m	DG1P073S26L0300R
	5m	DG1P073S26L0500R
	10m	DG1P073S26L1000R
AWG#28	1m	DG1P073S28L0100R
	3m	DG1P073S28L0300R
	5m	DG1P073S28L0500R
	10m	DG1P073S28L1000R

Applicable dimension for receptacle panel

• 4x Receptacle



• 12x Receptacle



Technical Information

	Part Number	SJ Drawing	Specifications	Note
Receptacle	DG1R025HS*	SJ103013	JACS-3284	4x Receptacle master drawing
	DG1R073HS*	SJ103011	JACS-3284	12x Receptacle master drawing
Clip for Panel Installation	D029-50198	SJ037707	JACS-3284	4x Receptacle clip
	D029-50197	SJ037655	JACS-3284	12x Receptacle clip
	D029-50199	SJ038604	JACS-3284	12x Receptacle clip (C type)
	D283-50016R	SJ106161	JACS-3284	12x Shield cover
Cable Harness	DG1P025S**L****R	Please contact us for further information.		
	DG1P073S**L****R			

Notice: Products shown in this leaflet are made for the applications listed below. However, if the above-mentioned products are to be used in aerospace devices, marine cable-connection devices, atomic power control systems, medical equipment for life-support systems, or any other specific application requiring extremely high reliability, please contact JAE for further information.
 Recommended applications: Computers, Office machines, Measuring devices, Telecommunication devices (Terminals, Mobile devices), AV devices, Household applications, FA devices, etc.

Japan Aviation Electronics Industry, Limited

Product Marketing Division
 Aobadai Building, 3-1-19, Aobadai, Meguro-ku, Tokyo 153-8539
 Phone: +81-3-3780-2787 FAX: +81-3-3780-2946

* The specifications in this brochure are subject to change without notice. Please contact JAE for information.
 JAE PMK Div. Proprietary. Copyright © 2006, Japan Aviation Electronics Industry, Ltd.