



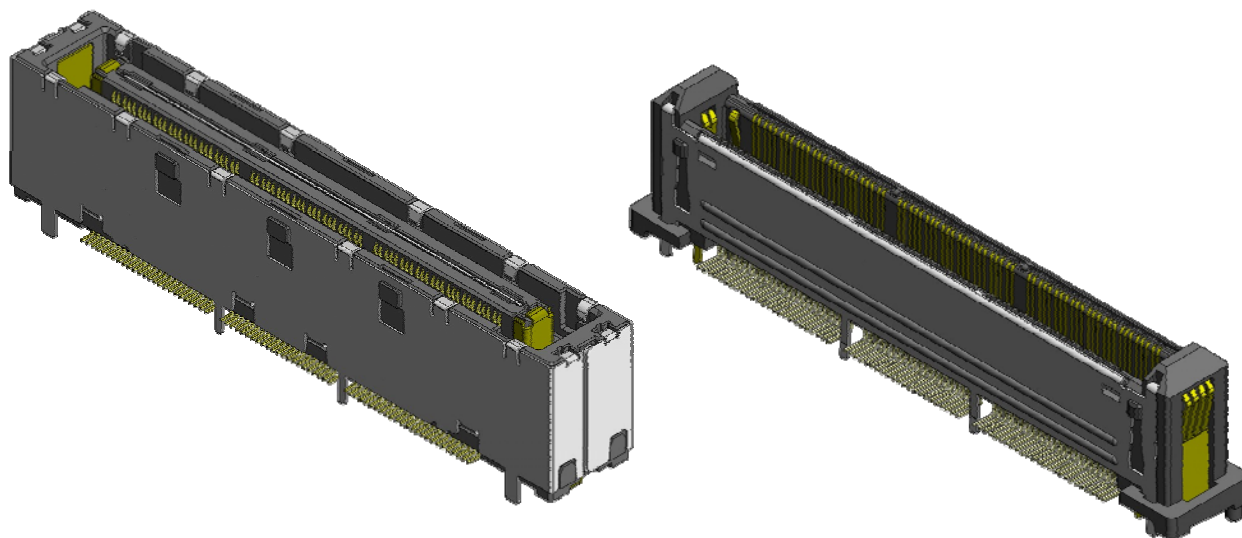
Docking Connector Compatible with PCI Express

CONNECTOR

MB-0200-1

March 2009

WD2 Series

RoHS Compliant

The WD2 Series are docking connectors compatible with high-speed differential transmission such as PCI Express.

Features

- Designed for high-speed serial transmission such as PCI Express and Display Port
- Ground bar on receptacle side for ESD (Electrostatic Discharge) countermeasure
- Available in several mating heights and angle variations
- Mating guide length in pitch direction $\pm 1.3\text{mm}$, cross direction $\pm 1.2\text{mm}$
- 4 pos. (2 pair) for power in mating guide area with current capacity of 10A per pair, 20A in total

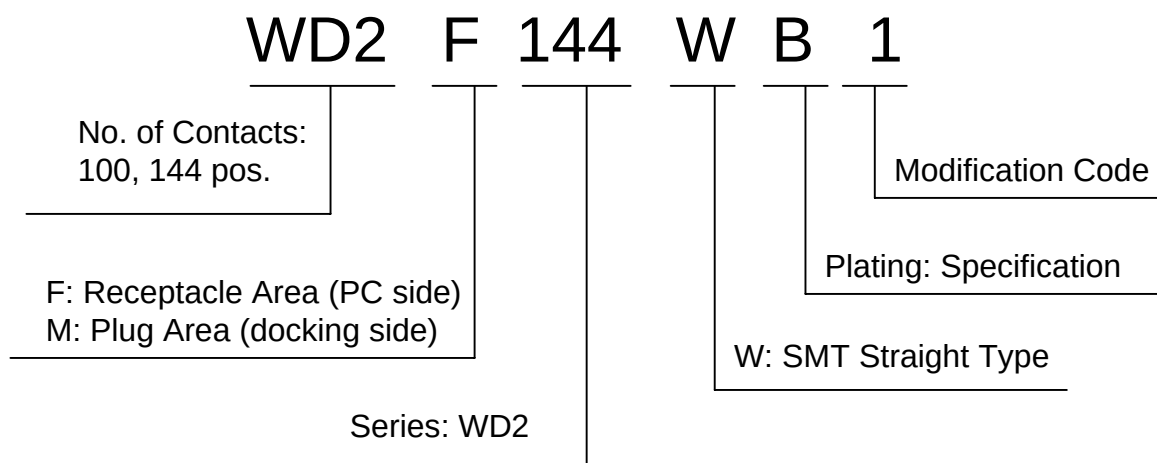
General Specifications

- No. of Contacts: 100, 144 pos. (for signal) + 4 pos. (for power)
- Contact Resistance: 190m ohm max.
- Dielectric Withstanding Voltage: AC500Vr.m.s. per minute
- Rated Current: 0.5 per terminal (signal), 10 A per pair (power)
- Insulation Resistance: 100M ohm min.
- Durability: 10,000 times
- Operating Temperature: -40 deg. C to 85 deg. C

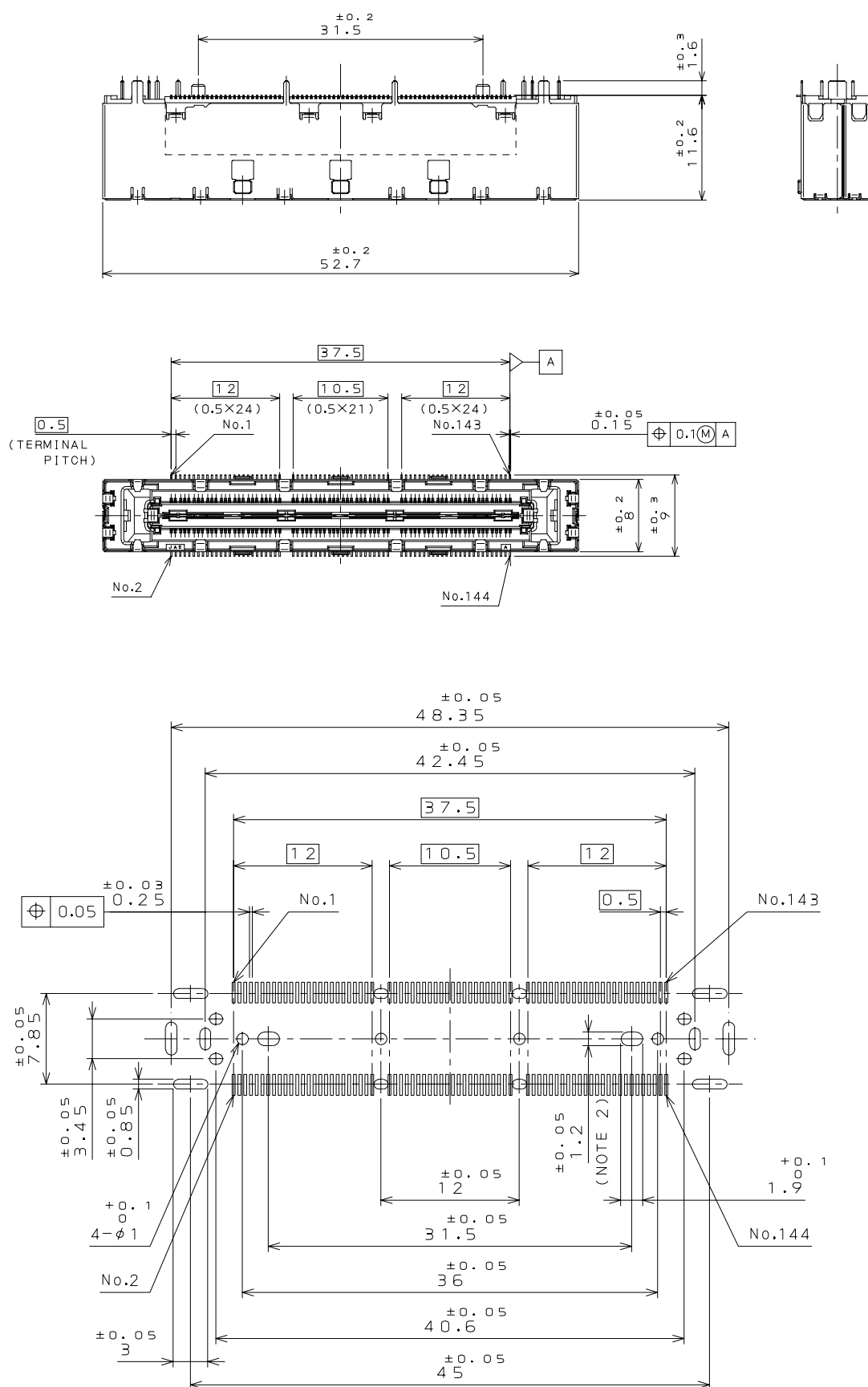
Materials and Finishes

Component	Material / Finish
Receptacle	
Signal Contact	Copper alloy / contact area: 0.3um min. Au plating over Ni
Power Contact	Copper alloy / contact area: 0.3um min. Au plating over Ni
Insulator	Glass filled LCP
Inner Insulator	Glass filled LCP
Shell	Copper alloy / Ni plating
Plate	Copper alloy / Sn plating
Plug	
Signal Contact	Copper alloy / contact area: 0.3um min. Au plating over Ni
Power Contact	Copper alloy / contact area: 0.3um min. Au plating over Ni
Insulator	Glass filled LCP
Shell	Copper alloy / Ni plating
Hold Pin	Copper alloy / Sn plating
Vacuum Area	Glass filled PPS (removed after mounting)

Ordering Information



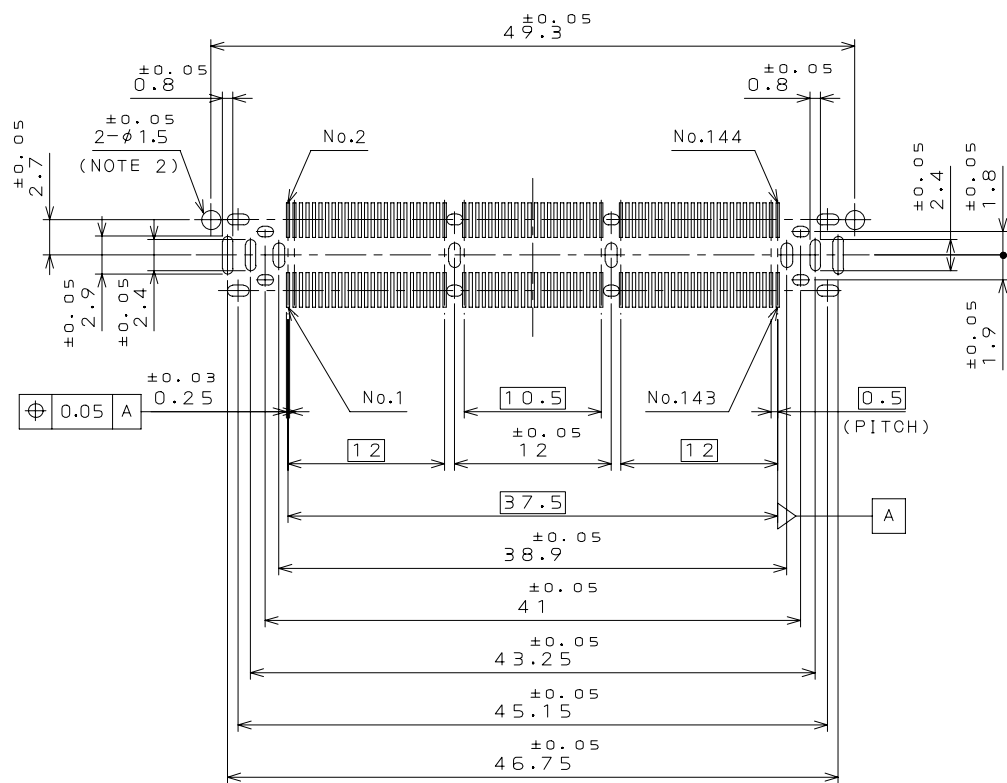
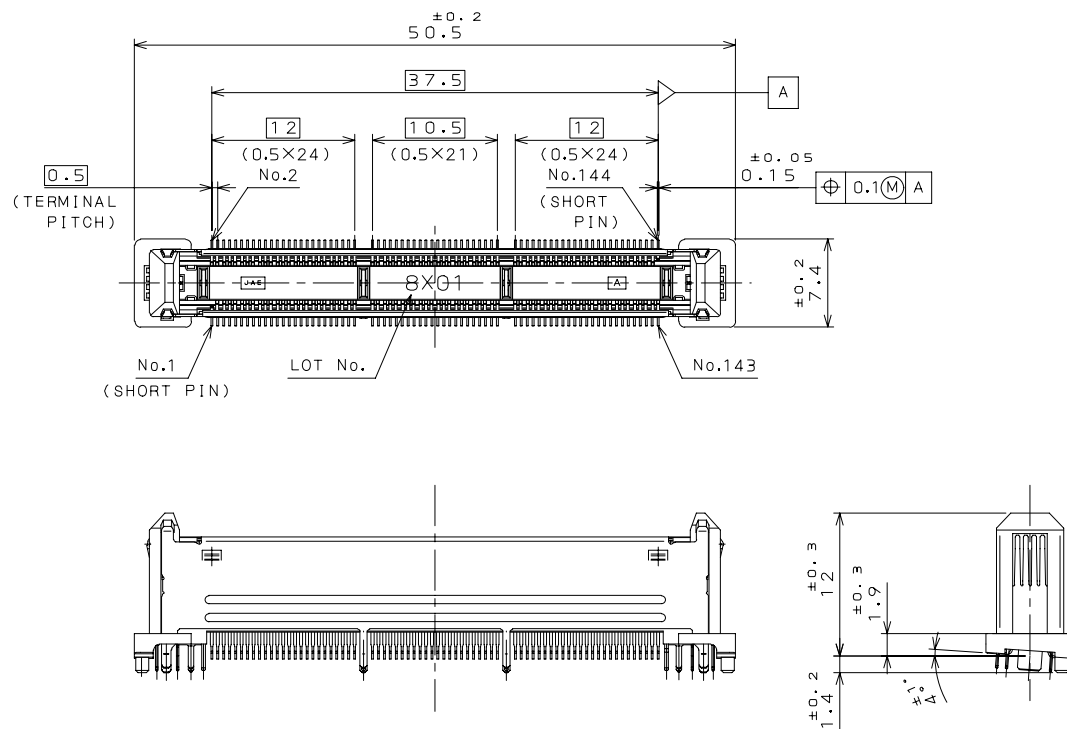
WD2F144WB1



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

適合基板寸法（参考）

WD2M144WB1



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

適合基板寸法(参考)

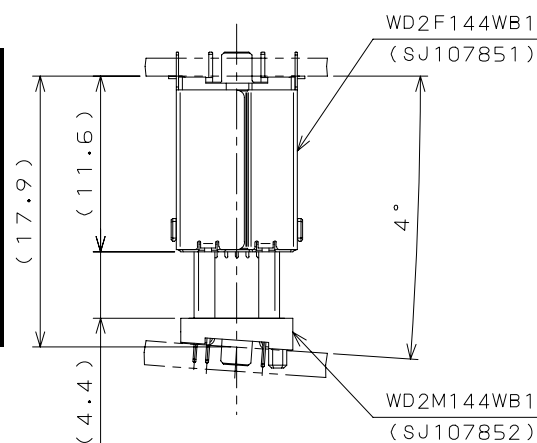
Drawing

	Part Number	SJ Drawing	Specification
144 pos.	Receptacle (PC side)		JACS-10491-01
	WD2F144WB1 WD2F144WB1R300	SJ107851 SJ108414	
	WD2F144WB2 WD2F144WB2R250	SJ108380 SJ108381	
	WD2F144WB3 WD2F144WB3R300	SJ108382 SJ108383	
	WD2F144WB4 WD2F144WB4R400	SJ108384 SJ108385	
	WD2F144WB5 WD2F144WB5R400	SJ108376 SJ108416	
	Plug (docking side)		
	WD2M144WB1 WD2M144WB1R300	SJ107852 SJ108415	
	WD2M144WB2 WD2M144WB2R300	SJ108374 SJ108375	
	Receptacle (PC side)		
	WD2F100WB3A WD2F100WB3AR300	SJ108477 SJ108478	
	WD2F100WB5A WD2F100WB5AR400	SJ108475 SJ108476	
100 pos.	Plug (docking side)		
	WD2M100WB1A WD2M100WB1AR300	SJ108473 SJ108474	
	Receptacle (PC side)		
	WD2F100WB3A WD2F100WB3AR300	SJ108477 SJ108478	
	WD2F100WB5A WD2F100WB5AR400	SJ108475 SJ108476	
Plug (docking side)			
WD2M100WB1A WD2M100WB1AR300	SJ108473 SJ108474		
Receptacle (PC side)			
WD2F100WB3A WD2F100WB3AR300	SJ108477 SJ108478		
WD2F100WB5A WD2F100WB5AR400	SJ108475 SJ108476		
Plug (docking side)			
WD2M100WB1A WD2M100WB1AR300	SJ108473 SJ108474		

Mating Combinations

144 pos. Variations		Receptacle (PC side)					
		Part Number	WD2F144WB1	WD2F144WB2	WD2F144WB3	WD2F144WB4	WD2F144WB5
		Drawing No.	SJ107851	SJ108380	SJ108382	SJ108384	SJ108376
		Connector Height	11.6	13.9	10.4	7.7	6.95
Plug side (docking side)	Part Number	WD2M144WB1	17.9	20.2	16.7	14	13.25
	Drawing No.	SJ107852					
	Connector Height	12					
	Mating angle	4					
	Part Number	WD2M144WB2	16.4	18.7	15.2	12.5	11.75
	Drawing No.	SJ108374					
	Connector Height	10.5					
	Mating angle	0					

100 pos. Variations			Receptacle	
		Part Number	WD2F100WB3A	WD2F100WB5A
		Drawing No.	SJ108477	SJ108475
		Connector Height	10.4	6.95
Plug	Part Number	WD2M100WB1A	16.7	13.25
	Drawing No.	SJ108473		
	Connector Height	12		
	Mating angle	4		



MATED CONDITION (REF.)

嵌合状態図 (参考)

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

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.