



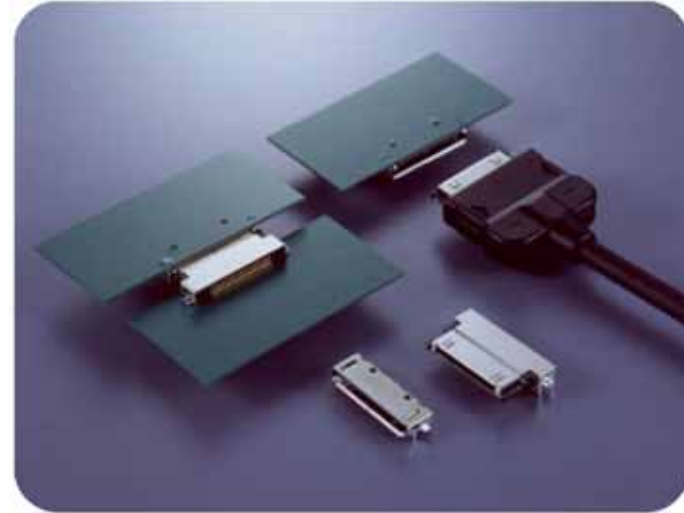
DD1/DD2 SERIES HIGH SPEED DOCKING CONNECTOR TRAINING MODULE

Technology to Inspire Innovation

JAE

OVERVIEW

The DD1 and DD2 series are docking connector families which are designed to transmit power and high speed differential signals to mobile devices. The male connector is available both as a traditional cable connecting plug, as well as a cradle (dock) plug which can be mounted directly to a PCB. An outer metal shell acts as a mechanical key and guide during mating, and also helps minimize EMI. Locking latches are included on the cable plug to ensure secure mating, while large guide posts on the cradle plug allow for blind mating/docking.




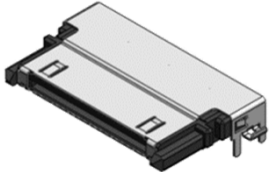



GENERAL SPECIFICATIONS

Number of contacts	DD1: 30 contacts DD2: 40 contacts
Rated Current	Signal: 0.5A Power: 1.0A
Rated Voltage	AC 30 Vrms
Operating Temperature	-25 °C to +75 °C
Mating Durability	10,000 cycles
Applicable Wire	AWG #28 max.
Mounted Height (receptacle)	DD1: 3.0mm DD2: 3.8mm




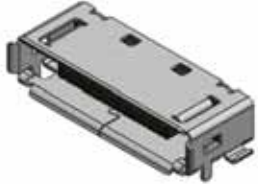
The DD1 series is a single row connector with 30 contacts while the DD2 series is a dual row connector with 40 contacts. They have current ratings of 0.5 amps per pin for the signal contacts, and 1 amp per pin for the power contacts. High durability is important for docking connectors, so the DD1 and DD2 series are rated for 10,000 mating and un-mating cycles.

AVAILABLE OPTIONS

DD1 Series (30 positions)

	Cable Plug	Cradle/Dock (Right angle)	Cradle/Dock (75°)	Receptacle (Standard)	Receptacle (Reverse)
Image					
Part Number	DD1P030MA1	DD1B030HA1	DD1B030VA1	DD1R030HA1	DD1R030JA7

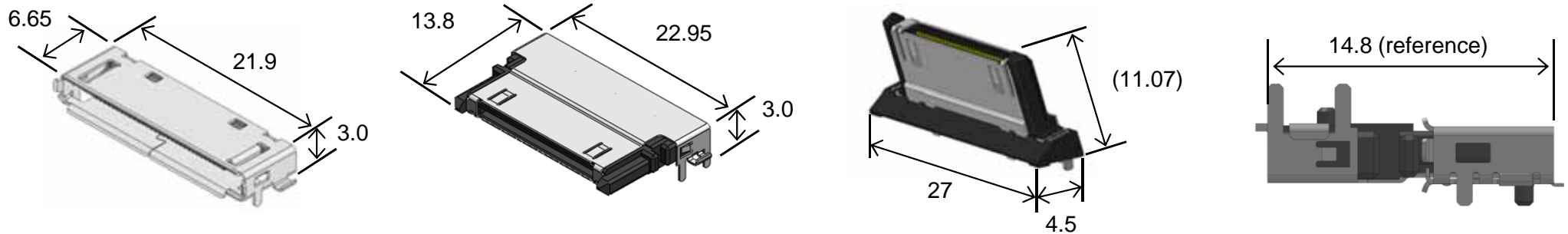
DD2 Series (40 positions)

	Cable Plug	Cradle/Dock (Right angle)	Dock/Cradle (70°)	Receptacle
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Part Number	DD2P040MA1	DD2B040HA2	DD2B040VP4	DD2R040HP2

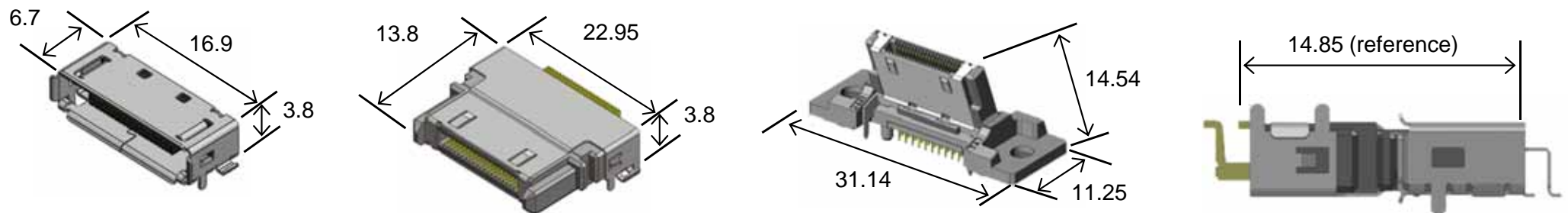
BASIC DIMENSIONS

*All units in mm

DD1 Series (30 positions)



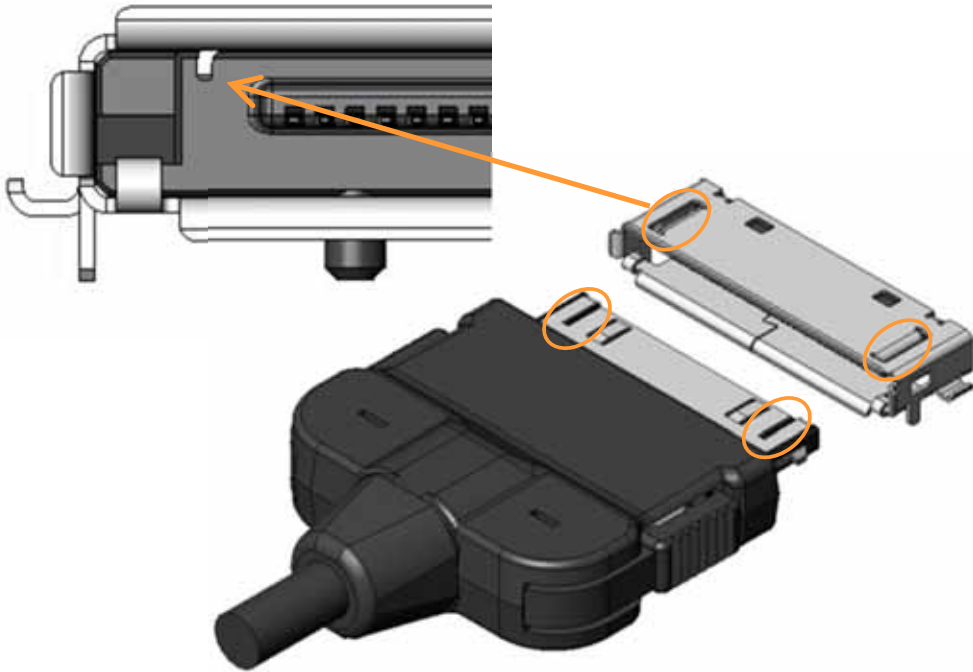
DD2 Series (40 positions)



The receptacle connectors which will mount on the mobile device is designed to have a small height to allow for thinner devices. All parts have a minimum of 2 through-hole hold-down legs to ensure that the retention force to the PCB is high.

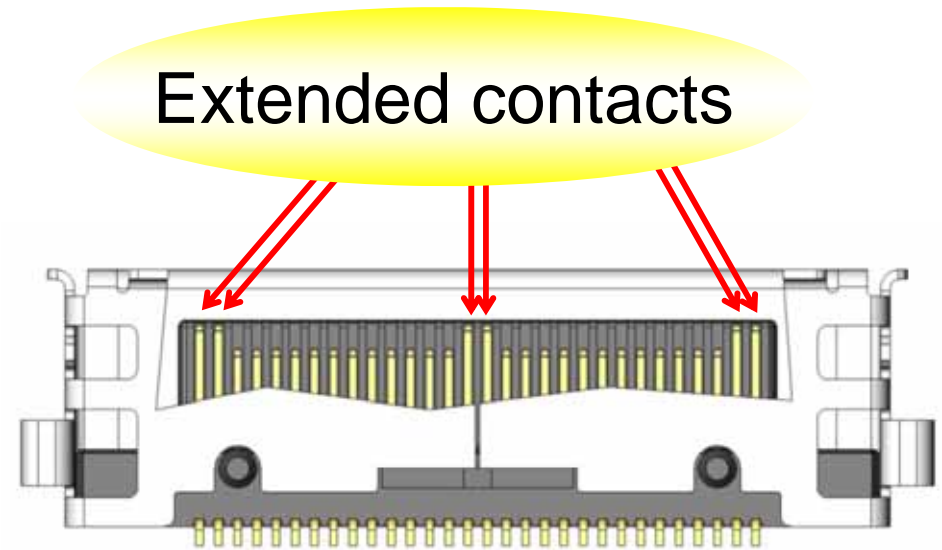
FEATURES

Guide Rail



Improves connector strength against side to side twisting forces when mating and unmating. (JAE proprietary design)

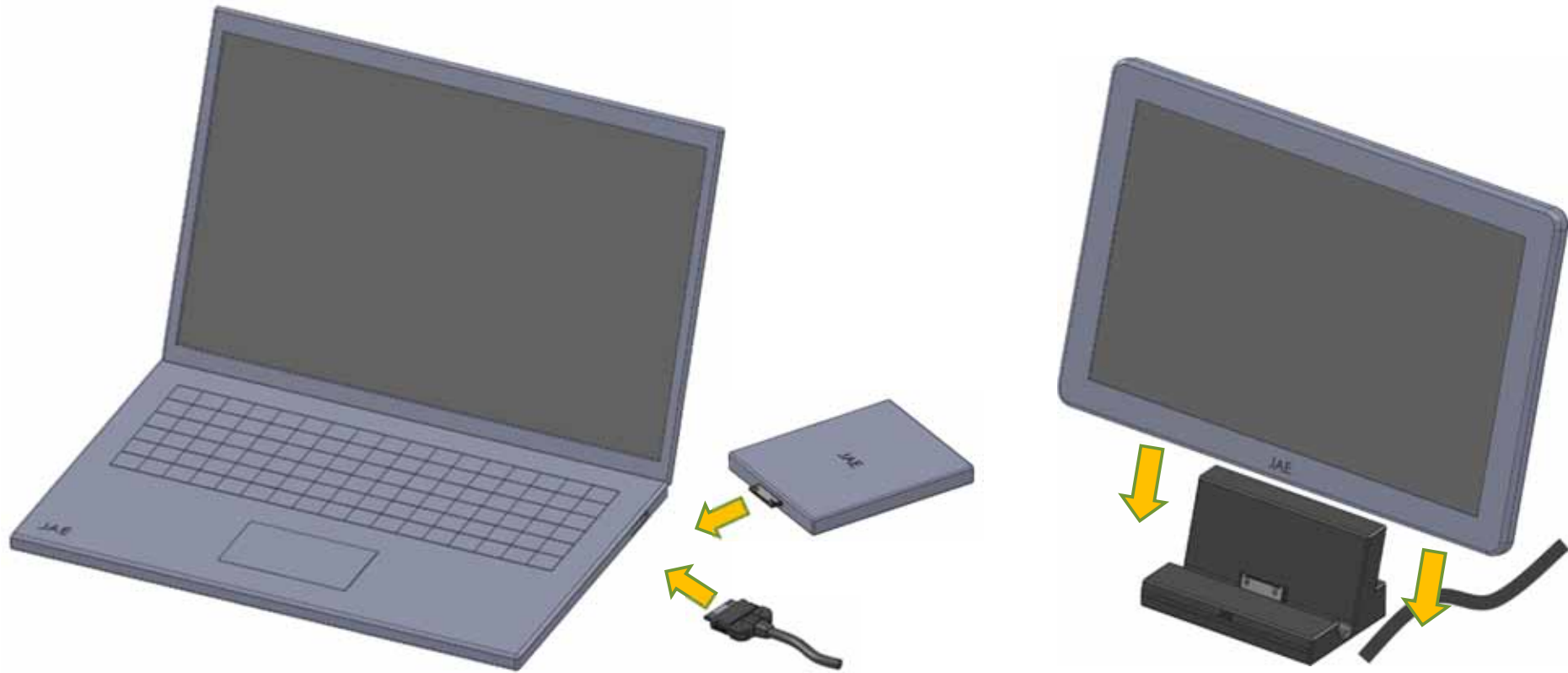
Power Contacts



Dedicated power contacts protrude farther than other contacts so they will be the first to mate and last to break. This allows for hot plugging.

The power contacts are also spread out as much as possible to help avoid excessive temperature rise in one area.

APPLICATIONS



The DD1 and DD2 series can be used for any mobile device which needs a compact and high pin count interface for transmitting data and power. The same host device can be either connected to a cable or to a dock. Possible applications include handheld scanners, PDA's, smart phones, tablets, laptop PC's, cameras, portable medical monitoring equipment, etc.

SUMMARY

The JAE DD1 and DD2 Series

- Docking connector families designed to transmit power and high speed differential signals to mobile devices
- The male connector is available both as a traditional cable connecting plug and a cradle (dock) plug which can be mounted directly to a PCB
- An outer metal shell acts as a mechanical key and guide during mating, and also helps minimize EMI
- Locking latches are included on the cable plug to ensure secure mating
- Large guide posts on the cradle plug allow for blind mating/docking

The DD1 series is a single row connector with 30 contacts while the DD2 series is a dual row connector with 40 contacts. They have current ratings of 0.5 amps per pin for the signal contacts, and 1 amp per pin for the power contacts. High durability is important for docking connectors, so the DD1 and DD2 series are rated for 10,000 mating and un-mating cycles.



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