# DN SERIES-NEW D SUBMINIATURE INTERFACE CONNECTORS

#### General

The DN series are compact, rectangular multi-contact connectors developed to meet the demand for smaller and slimmer electronic equipment. 2.54 mm grid contact position and Direct dip soldering on PCB enable high density circuit designing at reduced cost. Aluminum die-cast shell and Metallic shell areshieledto prevent from Electro-Magnetic interference. 20, 26, 36 and 50 way available.



#### Features

- 1. 2.54 mm grid contact position enable high density circuit designing.
- 2. Stable quality due to the contact design based on our field-proven SM series (D sub-connector).
- 3. One-touch lock system ensures perfect operation.
- The cover case uses a thin, low-back compact design that meets the needs of high density mounting. It can be mounted between 17.78 millimeters (700mil) substrates.
- 5. The cover case is made of aluminum diecast to shield aginst electromagnetic waves In a combination with a connector metal shell, the cover case is an ideal solution for noise.
- 6. Dip soldering connectors are provided with snap clamps for temporarily fixing the connector on the PCB.
- IDC termination types are for standard 1.27 mm pitch cables, and are available for two types of cables: AWG26 and AWG28.
- 8. Crimp contact cables from AWG26 through AWG28.
- 9. Allows you to take out the cable vertically or horizontally, as your application requires.

### Application

Office Automation, Computers, Communications Equipment, Factory Automation, Home Automation and other commercial applications needing high density interconnections.

### **Specifications and Material**

Main specifications		
Current capacity	3A	
Rated voltage	AC 200V	
Insulation resistance	5000mΩ on higher at DC 500V	
Contact resistance	20mΩ or less at DC 100mA	
Withstand voltage	1 minute AC 1000 Vrms	

Main materials used				
Shell	Aluminum dei-cash	Silver coating		
Insulator	PBT*	Black		
Contacts Phosphor bronze		Selective gold plating		

\*UL94V-0

#### **Ordering Information**



- (1) Series Number: DN
- (2) Type
  - 10: Right Angle Dlp Type
  - 30: IDC Plug Type
  - 50: Crimp Type
- (3) No. of Pins: 20, 26, 36 and 50 way
- (4) P: Plug
- S: Receptacle
- (5) ShellCVE1: Angle Cable Exit ShellCV1: Straight Cable Exit Shell
- (6) Applicable Wire2628: AWG#26 ~ AWG#28
- (7) Type of Contact PinPC1: Bulk Pin ContactPC2: Chain Pin Contact
- (8) Specification(50): RoHS compliant

#### **Cable specifications**



Pin: AWG#28(7/0.127) AWG#26(7/0.16)

#### **Crimp Pin Housing**



225-0027-0-50

225-0028-2-50

36

50

DN30-36P (50)

DN30-50P (50)

51.7

73.46 67.2 69.48

55.68 49.4

#### Angle Cable Exit Shell



### Straight Cable Exit Shell

DN-26-CV1

B 10.6





Unit: mm

HRS No.	No.of pin	Part No.	А	В	С	RoHS
225-0031-7	20	DN-20-CV1	45.9	13.7	9	
225-0024-1	26	DN-26-CV1	53.5	13.7	9.7	YES
225-0025-4	36	DN-36-CV1	66.2	14.2	11	1

#### **Right Angle P.C. Mount Receptacle**



### **PCB** Layout



#### mounting panel thickness 1.6mm

			Un	it: mm
No.of pin	20	26	36	50
А	32.0	39.6	52.3	70.1
В	22.86	30.48	43.18	60.96

#### Straight P.C. Mount Receptacle



#### **PCB Layout**



# Panel Cutout



#### **Pin Crimp Terminal**



#### **Applicable Wire**

Applicable wire: AWG No.26 ~ AWG No.28

Outer diameter of applicable wire

				Unit: mm
Way	20	26	36	50
Outer diameter	Max. 9.0	Max. 9.7	Max. 11.0	Max. 12.0

#### **Tooling (for Crimp Plug)**

#### CM-105 Crimp Maching

This machine has been carefully designed to meet the many requests for advanced crimping machines that can be used in a wider range of applications. This machine offers easy setup adjustment and applicator mounting. We are confident that the machine will find many applications as an easy-to-use semiautomatic machine for crimping strip contacts.

POWER SOURCE	AC 100V 200W
TOTAL WEIGHT	75 kgs
PERFORMANCE	2,000-4,000 crimps per hour
WORK RANGE	Adaptable to other HIROSE dies



Semi-Auto Machine CM-105 (CL901-0005-4) Applicator (Die) 105-DN50 (CL901-0208-1)



Hand Tool DN50-TA2628HC (CL250-0101-0)

## Tooling (for IDC Plug)



### **Hi-Flex Termination Press and Accessories**

#### General

The Hi-Flex termination press and its accessories connect the connectors to the HIF series ribbon cables more securely and quickly.

#### Features

- 1. No incomplete connections. A preventive ratcht-type device ensures against misconnections.
- 2. Prevents damage to connectors during connection. The guide plate works as a stopper to prevent damage to connectors due to connection pressure.
- 3. Easy to position the connector and cable. The guide plate case guide and cable stopper help positioning.
- 4. Capable of cable connection at an intermediate point when the cable stopper is removed.