cannon

ITT

Zero Insertion Force (ZIF) Connectors- DL and QLC Series

Ultra-Reliable, High Bandwidth Zero Insertion Force Connectors

Engineered to operate in a variety of medical, industrial, test and measurements applications, ITT Cannon's high-performance DL Series of Zero Insertion Force (ZIF) Connectors fills the need for cost-effective, multiple-wire power and signal interconnect solutions.

With an extraordinary rated life of 10,000 (DL) to 20,000 (QLC) mating cycles, ZIF connectors can be mated and unmated in two second and suffer no performance loss. Their high-bandwidth pinouts allows for full-flexibility and reconfigurable I/O.

The DL Series comes in multiple variants: Plastic DL, metal (DLM), shielded (DLP) and miniaturized (QLC), providing outstanding choice and superior performance in critical applications. A wide range of high-quality accessories, hand crimp tooling and contacts complements the series.

Simple, effective, and easy-to-assemble, you can rely on the DL Series to deliver the ultimate in performance - when it matters most.

The ITT Cannon Difference

- Global capabilities and local support
- A strong distribution network
- Proven application expertise
- Over a century of interconnect leadership
- A committed innovator and business partner

Key Product Features

- Min. 10,000 mating cycles
- High pin count: 60-440 layouts
- Single handed locking and actuation
- Cost effective
- Fast and easy assembly
- EMI/RFI shielding
- Operating temp:
  -40°C to +105°C / -40°F to +221°F
- RoHS compliant
- Easy contact termination

Applications

Medical • Industrial • Test and Measurements • Transportation • Telecommunications

ITT Cannon DL Series ZIF Connectors

	DL	DLM	DLP 136-272	DLP 408	QLC
					
Body	Plastic	Metal	Metal	Metal	Metal
Body material	Thermoplastic	Aluminium	Aluminium	Zinc Alloy	Zinc Alloy
Available layouts	60; 96; 156; and 260 signal	60; 96; 156; 260 and 360 signal	136;204 and 272 signal	408 signal	260,440 signal
Crimp contacts	yes	yes	-	-	-
Square Post contacts	yes	yes	-	-	-
PC/RC contacts	yes	yes	-	-	-
Pressfit contacts	yes (*)	yes (**)	no	yes	yes
Current rating	5 A max. (3)	5 A max. (3) / 4 A max. (4)	0,5 A max.	0,3 A max.	0,5 A max.
Contact resistance	15 milliohms max.	15 milliohms max.	30 milliohms max. (Initial)	30 milliohms max. (Initial)	100 milliohms max. (includes bulk resistance)
Contact material	20 or 50μ inches gold plated copper alloy	20 or 50μ inches gold plated copper alloy	Gold plated copper alloy	Gold plated copper alloy	40μ inch gold plated copper alloy
Operating temperature	-55°C to 105°C	-55°C to 105°C	-55°C to 85°C	-55°C to 85°C	-55°C to 85°C
RoHS compliant	yes	yes	yes	yes	yes
Factory terminated	Solder to PCB through hole or Press-fit	Solder to PCB through hole or Press-fit	Solder to PCB through hole	Press-fit	Solder to PCB through hole or Press-fit
Mating cycles	10.000 min.	10.000 min.	10.000 max.	10.000 max.	20.000 max.
EMI/RFI shielding	-	yes	yes	yes	440 = yes

* DL1-R, P/N: 127050-0454 / DL1-156R-PF
** DLM-Plug & Receptacle, DLM6-Receptacle 127050-0319 DLM6-360R-PF

Accessories					
Actuating handles	Plug & Receptacle	Plug & Receptacle	Plug & Receptacle	Plug & Receptacle	Receptacle
Protective cover (Rubber)	yes	yes	yes	-	no
Protective cover (Plastic)	yes	yes	yes	yes	no
Metal shell for EMI/RFI shielding	-	-	-	-	-
Plastic junction shell	yes	yes	-	-	-
Cable clamps	yes	yes	-	-	-
Metals backshell	yes	yes	-	-	-
Polarizing posts	yes (1)	yes (2)	yes	yes	no

Notes: (1) DL5 only (2) DLM5 only (3) Crimp or Square Post Contacts (4) PC/RC contact (5) Specification for Crimp Contacts smaller than 28 AWG

Why ITT

ITT is a focused multi-industrial company that designs and manufactures highly engineered critical components and customized technology solutions. ITT's Cannon brand is a leading global manufacturer of connector products serving international customers in aerospace, defense, medical, industrial and transportation end markets. ITT's Connector business, which also includes the Veam and BIW Connector Systems brand, manufactures and supplies a variety of connectors and interconnects that make it possible to transfer data, signal and power in an increasingly connected world.

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