

FEATURES AND SPECIFICATIONS



USB On-The-Go (OTG) Mini-B Receptacles

Molex offers the **USB On-The-Go Mini-'B'** interconnect solutions for mobile devices.

Data exchanges between handheld mobile devices are becoming very popular due to device portability. Considerations for data-transfer, integrity and synchronization without having to go through a PC host give rise to the development of the USB On-The-Go (OTG) interconnect solutions.

The development of the mini-B fills the gap in our USB product for handheld applications. It is fully compliant with the USB 2.0 specs that enable data-transfer speeds of up to 480Mbps, The physical structure is different from the standard USB 'B' connector in terms of the shape of the shell, circuit size i.e. 5 circuits (one reserved for host identification) vs 4 circuits and physical size (1/8 of the standard 'B').

As a member of the USB Implementer Forum, Molex's ensures a high level of application connectivity and reliability with our board USB OTG product offering.

48242 SMT, Right Angle, Sink Type
47153 SMT, Right Angle, DIP Type
88740 Cable Assemblies



Features	Benefits
• Metal shielding on all sides	• Superior shielding against RFI and EMI
• Single piece design	• Reliable assembly
• Grounding fingers	• Prevent Electro Static Discharge (ESD) during mating
• Solder tab	• Secure PCB retention
• Small footprint	• Less PCB real estate
• Detent lock	• Strong plug retention
• Shell design	• Ensures correct mating orientation
• ID pin	• Supports bi-directional data transmission between devices

SPECIFICATIONS

Reference Information

Packaging: Embossed Tape on Reel

UL File No.: Pending

CSA File No.: Pending

Mates With: USB OTG Mini-'B' Plug

Designed In: mm

Electrical

Voltage: 100V DC

Current: 1.8A

Contact Resistance: 40 milliohms Max

Dielectric Withstanding Voltage: 100V AC

Insulation Resistance: 100 Megohms min.

Mechanical

Cable pull out Force: 40.00N (8.99lb)

Contact Retention Force min: 4.00N (0.90lb)

Mating Force: 35.00N (7.87lb)

Unmating Force: 10.00N (2.25lb)

Durability: 5000 cycles

Physical

Housing: Liquid Crystal Polymer,
Glass-filled, UL 94V-0

Contact: Phosphor Bronze (CuSn)

Plating:

Contact Area — 0.76 μ m (30 μ in) Gold (Au)

Solder Tail Area — Tin (Sn)

Underplating — Nickel (Ni)

Operating Temperature: -20°C to +85°C

MARKETS AND APPLICATIONS

- **Digital still cameras**
- **MP3 players**
- **Cell phones**
- **Digital video cameras**
- **PDA's**
- **Other portable and hand-held devices**



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- 88740** Cable Assemblies

ORDERING INFORMATION

Connector

Description	Lead-Free Order No.	Mounting Type	PCB Retention	Lock to mating part
Universal Serial Bus (USB) On-The-Go (OTG) Mini-'B' Receptacle, SMT, Right Angle	47153-1002	DIP	Solder Tab and Through Hole Solder Pin	Detent
	48242-0001	Sink (Mid-Mount)	Solder Tab	

Cable Assembly

Description	Order No	Length	Color
'A' to Mini 'B' Cable Assemblies, USB 2.0 specs (High Speed)	887328500	0.8m (31.52")	White
	887328502	0.8m (31.52")	Black
	887328600	1.0m (39.40")	White
	887328602	1.0m (39.40")	Black
	887328700	1.5m (50.10")	White
	887328702	1.5m (50.10")	Black
	887328800	1.8m (70.92")	White
	887328802	1.8m (70.92")	Black
	887328900	2.0m (78.80")	White
	887328902	2.0m (78.80")	Black

**Please use 88740 as series search in molex.com for specs details of the above cables*



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Cable Assembly

Description	Order No	Length	Color
Mini-'A' to Mini 'B' Cable Assemblies, USB 2.0 specs (High Speed)	887538100	0.8m (31.52")	White
	887538102	0.8m (31.52")	Black
	887538200	1.0m (39.40")	White
	887538202	1.0m (39.40")	Black
	887538300	1.2m (47.28")	White
	887538302	1.2m (47.28")	Black
	887538400	1.5m (50.10")	White
	887538402	1.5m (50.10")	Black
	887538500	1.8m (70.92")	White
	887538502	1.8m (70.92")	Black
	887538600	2.0m (78.80")	White
	887538602	2.0m (78.80")	Black

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Americas Headquarters
2222 Wellington Ct.
Lisle, Illinois 60532 USA
1-800-78MOLEX
amerinfo@molex.com

Asia Pacific North Headquarters
Yamato, Kanagawa, Japan
81-462-65-2324
feninfo@molex.com

Asia Pacific South Headquarters
Jurong, Singapore
65-6-268-6868
fesinfo@molex.com

European Headquarters
Munich, Germany
49-89-413092-0
eurinfo@molex.com

Corporate Headquarters
2222 Wellington Ct.
Lisle, Illinois 60532 USA
630-969-4550

Visit our Web site at <http://www.molex.com>