EMI Filtered USB Connectors Series USB-F

Electrical Specifications

Operating Temperature	-55°C to +125°C
Working Voltage	5 VDC
Current Rating	1 Amp max.
Contact Resistance	30 mΩ max.
Temperature Range	-40°C to +71°C

Capacitive Filtered

Inductive Filtered

Common mode impedance	90Ω ±25%
	@ 100MHz
<i>IR</i>	10 MΩ min.
DC Resistance	0.30 Ω max

Material

Shell: Brass, nickel plated

Insulator: Thermoplastic, UL94V-0, reflow compatible *Contacts:* Phosphor bronze, gold flash over nickel

Inductive Filters for USB 2.0

56FU04-020 - socket right angle through hole connector



56FU04-020SM - socket-right angle surface mount connector



Note: ESD protection can be added to the 2.0 versions as an option



Capacitive Filters for USB 1.1

56FU04-004 - socket right angle through hole connector



56FU04-004SM - socket-right angle surface mount connector



56FU04-004TPM - socket right angle through hole connector with panel mount tabs



Note: Additional capacitor values available. Consult factory.

Custom styles and configurations available. Consult factory.

ESD Protected USB Connectors Series USB-E



Electrical Specifications

Operating Temperature	55°C to +125°C
Working Voltage	. 5 VDC
Current Rating	. 1 Amp max.
Contact Resistance	. 30 mΩ max.
Temperature Range	40°C to +71°C
Reverse standoff voltage	. 5 Volts
Reverse breakdown voltage	. 6 Volts
Clamping voltage	. Ipp=1A, tp=8/20us, 9.8 Volts (15 Volts for 56FU24-E01)
Junction capacitance, I/O to GND .	. 10pF max. (3pF max. for 56FU24-E01)

Protection Schematic



7.12 (.280)

2.71 (.107)

connector with TVS diodes

7.12 (.280)

5.12 (.202) →|13.65 (.537)

10.28 (.405)

-5.12 (.202) →13.65 (.537)

10.28 (.405)

6.90 (.272)

6.90 (.272)

← 1.75 (.069)

(.112)

56FU04-E01 - socket-right angle through hole connector with TVS diodes

2.08 (.082)

2.00 (.079)

56FU04-E01SM - socket right angle surface mount

2.08 (.082)

2.00 (.079)

POSITION 1

13.14 (.517)

POSITION 1

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13.14 (.517)

14.50 (.571)-

12.50 (.492)

.65 (.026) 2.50 (.098)

7.00 (.276)

14.50 (.571)

12.50 (.492)

.65 (.026) 2.50 (.098)

7.00 (.276)

Material

Shell: Brass, nickel plated *Insulator:* Thermoplastic, UL94V-0, reflow compatible *Contacts:* Phosphor bronze, gold flash over nickel

56FU24-E01 - stacked socket-right angle through hole connector with TVS diodes



Custom styles and configurations available. Consult factory.

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