

KFMDG Series Right Angle Mini-DIN with Ferrite

Features



- Audio, Video, Computer and Digital Equipment Applications
- Shielded Options Available for Good Conductivity, Grounding and EMI/RFI Protection
- Mates with Standard and Snap and Lock Plugs
- Visual and Mechanical Polarization for Plug Insertion
- Gold Plated Contacts
- CSA/NRTL Certified File No. LR78160
- Ferrite Block for High Frequency Noise Filtering

Performance Specifications

Body

KFMDG - PBT Thermoplastic, Black Color, UL94V-0 Rated

Contacts

Phosphor Bronze, Gold Plated

Shield

Brass, Tin/Lead Plated

Mechanical Characteristics

Insertion Force

0.5 kg - 4.5 kg

Extraction Force

0.4 kg - 3.5 kg

Durability

500 Cycles Minimum with Test Plug

MINI-DINs / CIRCULAR DINs

KFMDG Series

Electrical Characteristics

Contact Current Rating

2 Amp at 12V DC

Insulation Resistance

500 Megohms Min

Contact Resistance

Before Durability Test

Plug to Shield: 50 Milliohms Max.

Plug to Terminals: 30 Milliohms Max

After Durability Test

Plug to Shield: 100 Milliohms Max

Plug to Terminals: 60 Milliohms Max.

Dielectric Withstanding Voltage

500V AC for 1 Minute

Operating Temperature

-25°C to +85°C

Ferrite Specifications

Impedance	Value	Test Frequency
Z (Ohm)	13-15 Min	30 MHz
Z (Ohm)	15-18 Min	50 MHz
Z (Ohm)	20-22 Min	100 MHz

Ordering Information

KFMDG	-	6	S	-	BS	
Series		Number of Contacts	Contact Type		Shielding Options	Plating Options

Series

KFMDG - Right Angle PCB Mount Mini-DIN with Ferrite

Number of Contacts

3, 4, 5, 6, 7, 8

Contact Type

S - Receptacle

Shielding Options

BS - Fully Shielded

BSC- Fully Shielded with Crimped Side Tabs

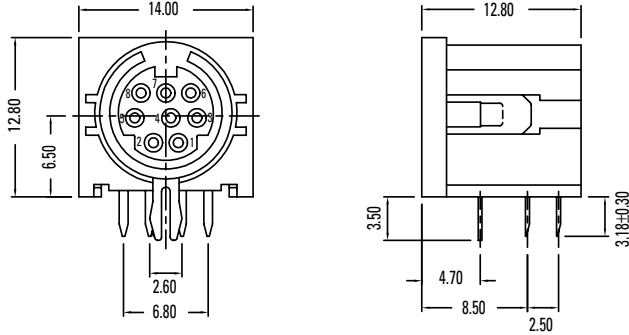
Plating Option

Standard	Gold flash over nickel on contacts. Tin/lead over nickel on soldertails
30	30µ" gold over nickel on mating end of contacts. Tin/lead over nickel on soldertails.

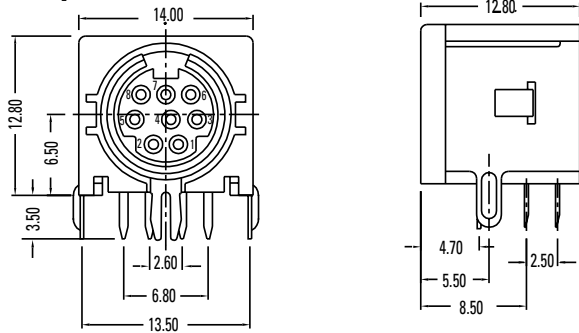
KMDG & KFMDG Series Dimensions

Dimensions in mm

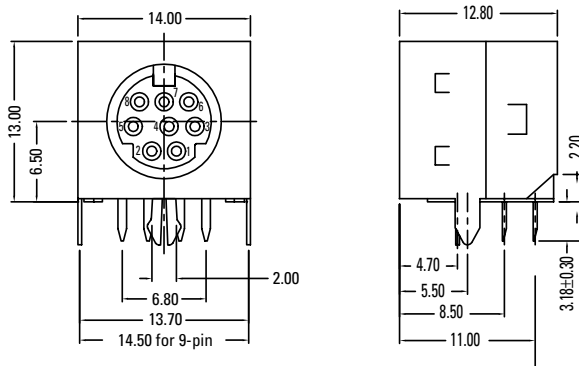
-N Option (Non-Shielded)



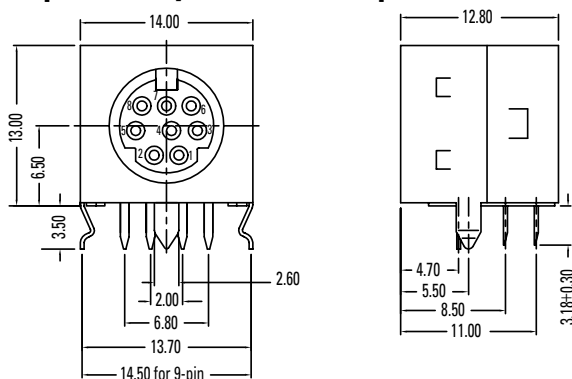
-AS Option (4 Side Shielded)



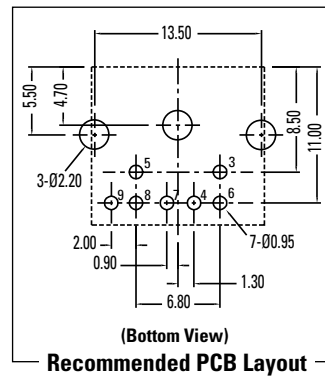
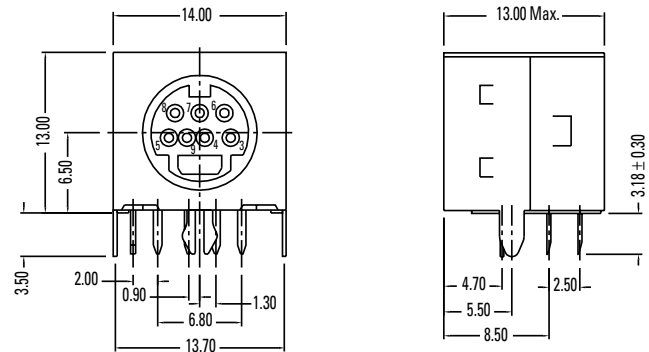
-BS Option (Fully Shielded)



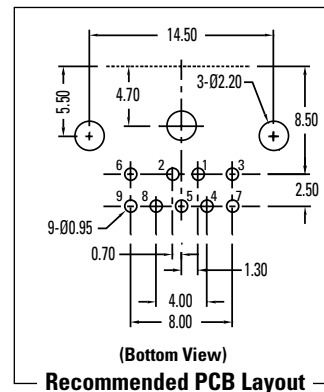
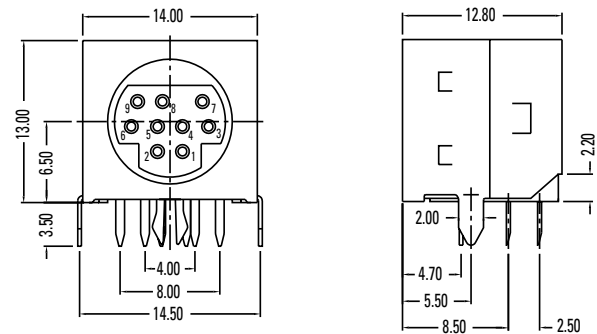
-BSC Option (Fully Shielded Crimped Side Tabs)



KMDG-GEO-7S-BS (7 Position, GEO Port)



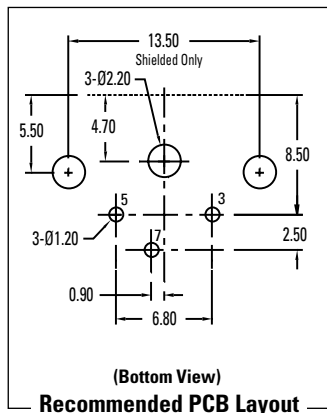
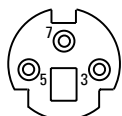
KMDG-9S-BS (9 Position, Fully Shielded)



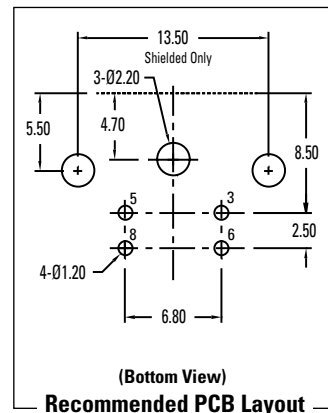
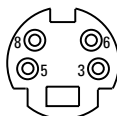
**KMDG & KFMDG Series
Socket Configurations and
Recommended PCB Layout**

Dimensions in mm

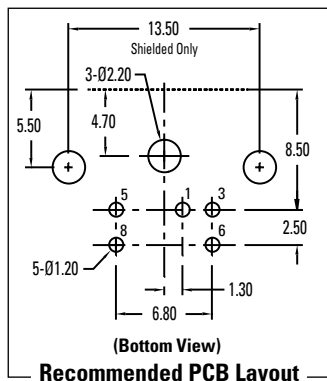
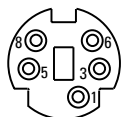
3 Position



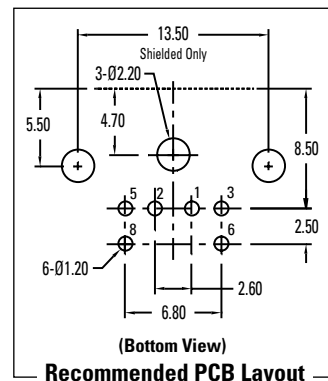
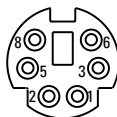
4 Position



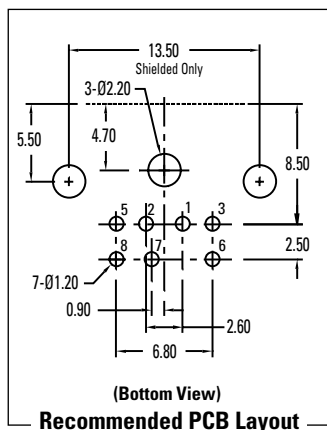
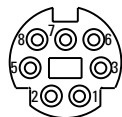
5 Position



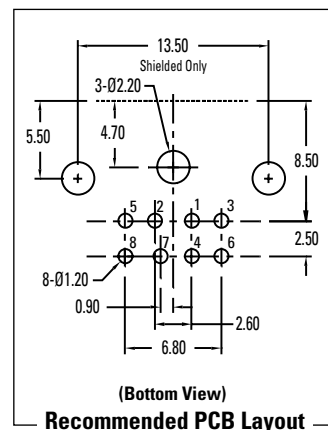
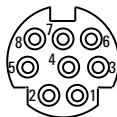
6 Position



7 Position



8 Position



KYCON continues its leadership in Ferrite D-Subs by offering a complete line of styles, sizes, and pin configurations.

Features:

- Applications include Computer Peripherals, Data Processing, Telecommunications, Industrial Controls, and Local Area Networks
- High performance ferrite filter with superior high frequency attenuation characteristics
- Minimal effect on fundamental waveforms
- EMI/RFI noise suppression in data communication lines
- Cost effective way to meet FCC and VDE Class B requirements
- Does not require any more board space than a standard D-Sub
- No need to redesign board layout to accommodate separate filter placement
- UL Recognized File No. E140125

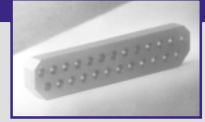


FERRITE D-SUBMINIATURE CONNECTORS

Directory

Right Angle

KF22 - 0.318" footprint	28
KF44 - 0.590" footprint	29
KF66 - High Density 0.350" footprint	30
KF42 - Dual Port	31



Vertical

KF85 - Low Profile	32
KF86 - High Density	33
KF88 - High Profile	34



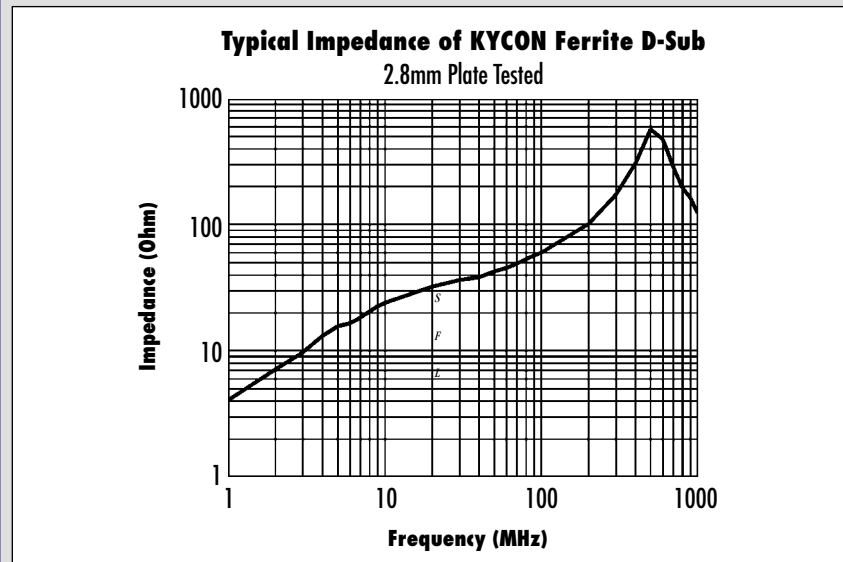
Technical Information:

Ferrite filters provide an easy and efficient way of reducing both radiated and conducted interference. KYCON uses a medium permeability nickel zinc ferrite material that is most effective at attenuating frequencies above 30MHz.

$$Attenuation = 20 \log_{10} \frac{[Z_s + Z_f + Z_L]}{[Z_s + Z_L]} \text{ dB}$$

Where Z_s = Source Impedance
 Z_f = Ferrite Impedance
 Z_L = Load Impedance

With the above impedance values calculated at the interference frequency.



The above chart is typical performance data for a 2.8mm thick ferrite plate at room temperature. Impedance will be reduced by increased temperature (down approx. 15% at 100°C at 25MHz) and by increased DC bias (down approx. 15% at 1 amp at 25MHz). Also, impedance varies with ferrite thickness. Please contact our technical support for data specific to your application.

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 or E-mail: sales@kycon.com