

Specifications for 3M™ SC Couplings

Product Number	6310	8310	8310G	6313	8313
Description	Coupling	Coupling	APC Coupling	Coupling, duplex	Coupling, duplex
Operating temperature	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 85°C (-40° to 185°F)	-40° to 75°C (-40° to 167°F)	-40° to 75°C (-40° to 167°F)
Material Housing	Engineering Thermoplastic Phosphor bronze Beige	Engineering Thermoplastic Zirconia ceramic Blue	Engineering Thermoplastic Zirconia ceramic Green	Engineering Thermoplastic Phosphor bronze Beige	Engineering Thermoplastic Zirconia ceramic Blue
Ordering Information					
Packaging	1/pkg., 60/cs.	1/pkg., 60/cs.	1/pkg., 60/cs.	1/pkg., 60/cs.	1/pkg., 60/cs.
Minimum order	60 pkgs.	60 pkgs. [368968]	60 pkgs.	60 pkgs.	1 pkgs. [409936]
UPC	051138-58072	054007-48713	054007-92948	051138-58073	054007-92464

3M™ Low EMI SC Connectors

The 3M™ SC Low EMI Connector is made of non-ferrous materials to minimize electromagnetic interference for high speed transmission equipment such as routers, switches, servers and test bed applications. These connectors are available in single-mode and multimode, and as part of simplex, duplex and multifiber cable assemblies.

The 3M Low EMI Connectors were tested for radiant emissions to simulate typical use in data transmission applications. 3M Low EMI Connectors passed FCC Part 15, Class B, Radiant Emissions per test method ANSI C63:4:1992. The FCC Class B specification requires an emission level below 54 dBuV/m.

Low EMI SC Connectors are ideal for applications running at speeds of 1 to 10 Gb/s transmission associated with storage and system area networks (SANs), Internet server farms (Infiniband), metro and wide area network (MAN and WAN) central offices, local area networks (LANs) and other specialty applications to prevent noise generated inside the box from radiating through the transceiver. Primary applications for low EMI interconnects are in storage and server markets associated with Infiniband and Fibre Channel forums, and in MAN/WAN Ethernet OEMs.

Advantages

- Minimizes electromagnetic interference from equipment
- Reduces noise in high speed equipment
- Eliminates the need for sophisticated grounding and shielding
- Compliance with FCC Class B
- Provides low attenuation and low reflection
- Easily field terminated with the ferrule integrated into the connector
- Standard SC design with push-pull coupling mechanism for easy insertion and high repeatability

Specifications for 3M Low EMI SC Connectors

	Single-mode	Multimode
Insertion Loss (dB)	<0.3 typical	<0.2 (62.5/125µm fiber)
Reflection (dB)	<-45 typical	<-25 typical
Connection Durability (500 matings)	<0.2 dB change	<0.2 dB change
Operating Temperature (cable dependent)	-40° to 85° C (-40° to 185° F)	-40° to 85° C (-40° to 185° F)
Storage Temperature	-40° to 85° C (-40° to 185° F)	-40° to 85° C (-40° to 185° F)
Cable Tension Straight Pull Side Pull	<0.5dB increase @ 7.5 lbs. <0.5dB increase @ 3 lbs.	<0.5dB increase @ 7.5 lbs. <0.5dB increase @ 3 lbs.
Material Connector Ferrule Connector Body & Shell Boot	Zirconia Ceramic Engineering Thermoplastic Elastomer Resin	Zirconia Ceramic Engineering Thermoplastic Elastomer Resin
Flame Retardancy	UL-94 V-0	UL-94 V-0

Ordering Information for 3M Low EMI SC Connectors

Product Number	Description	Pkg.	UPC
6309-BE	Low EMI SC Connector MM, beige boot	1/60	051138-70869
8309-U	Low EMI SC Connector SM, blue boot	1/60	051138-70870