

SMC™ S Connector

DESCRIPTION

The connector type SMC is an optical multifiber connector which is characterized by a standardized MT ferrule interface (fiber pitch is 250µm) for up to 12 fibers. It was developed by Siemens/Infineon and specially designed for the PAROLI® module port.

The connector is now part of a whole SMC product family to be applied for a variety of state-of-the-art and future optical network technologies.

The MT ferrule characteristics meet the requirements of the standards IEC 60874-16 and IEC 61754-5. Work is in progress to define a fiber optical connector intermateability standard for the SMC (FOCIS-14, Ref. no. SP-4834, to be TIA/EIA-604-14).

FEATURES

- Ultra-flat and extrem short connector body
- SMC S without strain relief for ribbons or ribbons with jacket
- Spring loaded ferrule in the direction of the optical axis
- Reliable two-sided ESCON®-like latching mechanism
- Uniform pressure of connector endface to mated device
- Integrated mechanical keying to orient relative position between mated parts
- Prealignment (lateral guidance) of the connector housing when mating in an adapter or a receptacle
- Pins for optical alignment precision
- Endface polish guarantees fiber physical contact
- Connector stackability allowed by housing design
- SMC adapter and module receptacle available

TECHNICAL DATA

Parameter	Min	Typ.	Max.	Unit
IL/per fiber, MM ¹		≤0.2	0.75	dB
CL/per fiber, SM ²		≤0.2	0.75	dB
RL/per fiber, SM ³	50			dB
Durability/Matings			1000	times
Repeatability		≤0.2		Δ dB
Cable Retention Force		100		N
Insertion Force		13	18	N
Withdrawal Force		4	7	N
Operating Temperature	-40 to +85			°C
Storage/Shipping T.	-40 to +85			°C
Flammability	min UL 94 V-1			
Connector Dimensions	see figure 1			
Ferrule Dimensions	8.0 x 6.4 x 2.45			mm
Ferrule Endface	flat or angled polished (SM)			
Housing Color	black or beige			

¹ Insertion Loss, multimode

² Connection Loss, singlemode

³ Return Loss, singlemode

DIMENSIONS

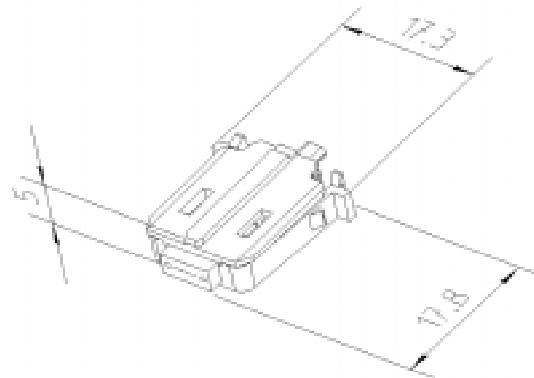


Fig. 1: SMC S connector, female version

MATERIALS

Part	Material
Housing	PBT
Ferrule	mineral filled thermoset epoxy
Spring	stainless steel
Pin	stainless steel
Pin holder	stainless steel
Dust Cap	TPR, black

PART NUMBERING

V23834-xxx (options on request)

APPLICATION NOTE

- Connector-adapter-connector and jumper configurations compliant to commercial performance standards Bellcore GR-1435-CORE, IEC 60874-1 and EIA/TIA-455 FOTP requirements
- Multimode apps qualified, singlemode apps newly engineered
- Reliable multiple-link and high-bandwidth on-board applications

For further information, please contact your Infineon Technologies Sales Representative.

SMC™ and Paroli® are (registered) trademarks of Infineon Technologies.

ESCON® is a registered trademark of IBM.

All rights reserved.