

\*Easily adapted to application specific design and performance constraints. Please contact Inside Sales for details.

### Features & Benefits

- System based on NTT-SC\* standard
- System integrates:
  - BSC or BSCII backplane connector
  - Backplane adapter
  - NTT-SC standard connector •
- Backplane connector:
  - PC board mountable: blind mate coupling
  - Tunable feature for the BSCII
  - Removable ferrule assembly
- Stackable design for multiple channels
- Floating ferrule design is self-aligning
- Low insertion loss:
  - < .2 dB TYP MM
  - < .15 dB TYP SM
- Backplane adapters:
  - Traditional SC style
  - SC style with shutter

## **Applications**

- Telecommunication equipment
  - Transmission
  - Switching
  - Multiplexing
- Broadband equipment
  - Amplifiers
- Computing equipment

The BSC and BSCII backplane connector systems have been designed to provide a smooth transition from the board mounted and pigtailed devices (LED's, lasers, receivers, and WDM devices) to the SC based fiber optic network. Pigtailed active devices, located anywhere on the daughter card, are terminated to the card edge mounted BSC or BSCII connectors. These connectors provide a blind mating interface through backplane BSC adapters to the SC network.

The BSC connector family's blind mating interface provides the daughter card with a plug-in feature that allows the card to be inserted, or exchanged without disrupting the input/output ports or their associated cabling. The BSCII connector, backward compatible with the original BSC, provides additional float in the Y (±.030") and Z (.080") axis. This increased float, provides the BSCII with additional capacity to compensate for the imprecision of card cages. For multiple fiber applications, alignment pins in the housing allow the connectors to be stacked.

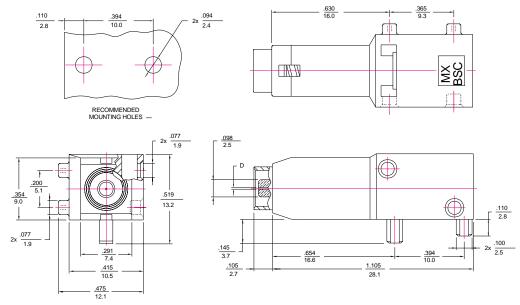
BSC / BSCII to standard SC connector mating is accomplished through the BSC / BSCII adapters which are available with either zirconia ceramic or phosphor bronze sleeves. In addition to the traditional SC style adapter, a shuttered SC version, which shields against laser exposure and dust contamination, is also available.

\*NTT-SC is a trademark of NTT Advanced Technology Corporation

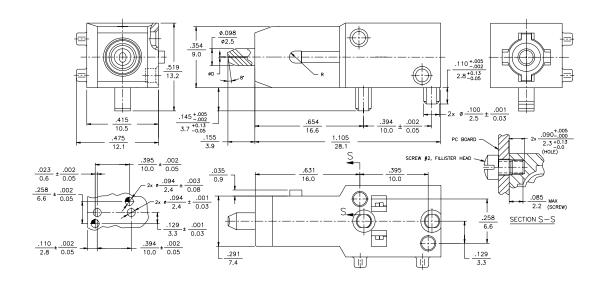


### **Mechanical Dimensions**

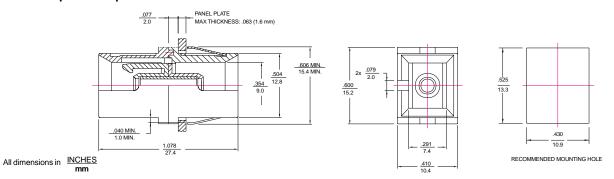
## **BSC Backplane Connector**



#### **BSCII/APC Connector**



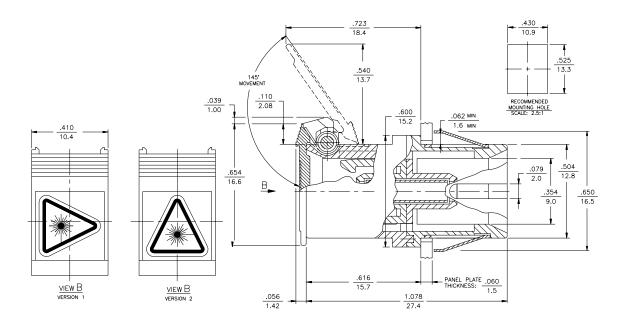
#### **BSC Backplane Adapter**



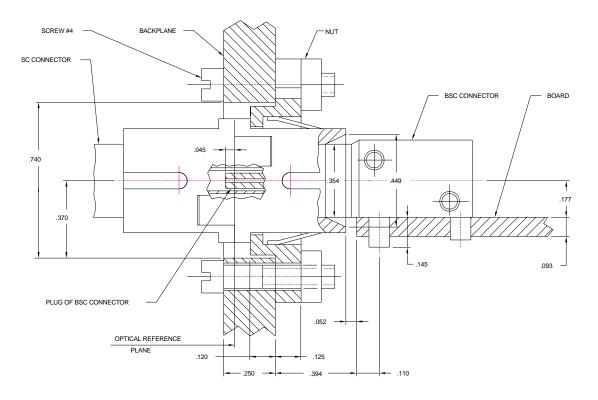


# **Mechanical Dimensions**

### **BSCII Adapter with Shutter**



## **BSC Backplane Connector System Assembly**





# **Standard Part Numbers**

Order Number 86070-3000 86070-5000 86075-5000	<b>Description</b> BSC backplane connector, MM, zirconia PC ferrule, buffered fiber <sup>†</sup> BSC backplane connector, SM, zirconia PC ferrule, buffered fiber <sup>†</sup> BSC backplane connector, APC, SM, zirconia PC ferrule, buffered fiber <sup>†</sup>	<b>Hole size</b> 128μm 126μm 126μm	Cable size 900µm buffered fiber 900µm buffered fiber 900µm buffered fiber
86171-0000 86170-0000 86171-0030 86170-0030	BSC backplane adapter, MM, phosphor bronze alignment sleeve, black housing BSC backplane adapter, SM, zirconia alignment sleeve, black housing BSC backplane adapter, MM, phosphor bronze alignment sleeve, red housing BSC backplane adapter, SM, zirconia alignment sleeve, red housing		
86170-0020 86171-0020	BSC backplane adapter, APC, SM, zirconia alignment sleeve, green housing BSC backplane adapter, APC, MM, phosphor bronze alignment sleeve, green housing		
86170-0400 86171-0400 86170-0430 86171-0430	BSC backplane adapter, SM, zirconia alignment sleeve, black housing, shutter BSC backplane adapter, MM, phosphor bronze alignment sleeve, black housing, shutter BSC backplane adapter, SM, zirconia alignment sleeve, red housing, shutter BSC backplane adapter, MM, phosphor bronze alignment sleeve, red housing, shutter		
86170-0420 86171-0420	BSC backplane adapter, APC, SM, zirconia alignment sleeve, green housing, shutter BSC backplane adapter, APC, MM, phosphor bronze alignment sleeve, green housing, shutter	r	
86800-6501 86800-6502 86800-6503	BSC backplane adapter mounting plate, 2 positions BSC backplane adapter mounting plate, 4 positions BSC backplane adapter mounting plate, 2 positions, vertical		
86071-3000 86071-5000 86076-5000	BSCII backplane connector, MM, zirconia PC ferrule, buffered fiber <sup>†</sup> BSCII backplane connector, SM, zirconia PC ferrule, buffered fiber <sup>†</sup> BSCII backplane connector, APC, SM, zirconia PC ferrule, buffered fiber <sup>†</sup>	128µm 126µm 126µm	900µm buffered fiber 900µm buffered fiber 900µm buffered fiber
86171-2000 86170-2000 86171-2030 86170-2030	BSCII backplane adapter, MM, phosphor bronze alignment sleeve, black housing BSCII backplane adapter, SM, zirconia alignment sleeve, black housing BSCII backplane adapter, MM, phosphor bronze alignment sleeve, red housing BSCII backplane adapter, SM, zirconia alignment sleeve, red housing		
86170-2020 86171-2020	BSCII backplane adapter, APC, SM, zirconia alignment sleeve, green housing BSCII backplane adapter, APC, MM, phosphor bronze alignment sleeve, green housing		
86170-2400 86171-2400 86170-2430 86171-2430	BSCII backplane adapter, SM, zirconia alignment sleeve, black housing, shutter BSCII backplane adapter, MM, phosphor bronze alignment sleeve, black housing, shutter BSCII backplane adapter, SM, zirconia alignment sleeve, red housing, shutter BSCII backplane adapter, MM, phosphor bronze alignment sleeve, red housing, shutter		
86170-2420 86171-2420	BSCII backplane adapter, APC, SM, zirconia alignment sleeve, green housing, shutter BSCII backplane adapter, APC, MM, phosphor bronze alignment sleeve, green housing, shutt	er	
86800-6543 86800-6542 86800-6541	BSCII backplane adapter mounting plate, 2 positions BSCII backplane adapter mounting plate, 4 positions BSCII backplane adapter mounting plate, 2 positions, vertical		

 $<sup>^\</sup>dagger BSC\ connector\ is\ typically\ offered\ in\ a\ pigtail\ assembly\ form.\ Please\ contact\ Inside\ Sales\ for\ part\ number\ information.$