# iCBOS-K-Q-OS-SMPM/iCNOS8

40 GHZ O-SMPM TO K 50 GHZ O-SMPM TO 2.4 MM 67 GHZ O-SMPM TO 1.85 MM O-SMPM CABLE 1X8/2X8 O-SMPM SMT PCB CONNECTOR

The O-SMPM cable and 1x8 O-SMPM connector guarantee high electrical and mechanical reliability and stability.



#### **KEY FEATURES**

High electrical and mechanical reliability and stability.

Insert directly the connector for quick application or tighten cable bolts with the connector for high stability during long operations.



## CABLES

### 1x8 O-SMPM cable with screw



#### 2x8 O-SMPM cable with screw





#### 1x8 and 2x8 O-SMPM cable without screw



Cable and connector match





# **CABLE SPECIFICATIONS**

ELECTRICAL (2.92 mm/2.4 mm/1.85 mm)			
Impedance	0 – 67 GHz		50 Ω
Return loss	2.92 mm 2.4 mm 1.85 mm	0 – 40 GHz 0 – 50 GHz 0 – 67 GHz	15 dB (max)
Insertion loss (15 cm)	2.92 mm 2.4 mm 1.85 mm	0 – 40 GHz 0 – 50 GHz 0 – 67 GHz	1.2 dB (max) 1.3 dB (max) 1.9 dB (max)
Velocity of propagation	0 – 67 GHz		80 % (nominal)

MECHANICAL	
Outer diameter of cable	2.54 mm (nominal)
Min. bend radius static/single	15 mm
Typical flex cycles	10,000 cycles
Temperature range	−40 °C to 125 °C (−40 °F to 257 °F)

# **TYPICAL INSERTION LOSS AND RETURN LOSS**





1.85 mm connector, 30 cm long

2.92 mm connector, 60 cm long



## **ORDERING INFORMATION**



## 1X8/2X8 O-SMPM CABLE WITH SCREW a, b, c

iCBOS-Km-7,15,30,60	40 GHz, 1x8/2x8 O-SMPM (with screw) to K (male) cable
iCBOS2-Km-7,15,30,60	Typical insertion loss 0.7 dB (7 cm), 1.2 dB (15 cm), 1.7 dB (30 cm), 3.2 dB (60 cm)
iCBOS-Qm-7,15,30,60	50 GHz, 1x8/2x8 O-SMPM (with screw) to 2.4 mm (male) cable
iCBOS2-Qm-7,15,30,60	Typical insertion loss 1.0 dB (7 cm), 1.3 dB (15 cm), 2.0 dB (30 cm), 3.5 dB (60 cm)
iCBOS-Vm-7,15,30,60	67 GHz, 1x8/2x8 O-SMPM (with screw) to 1.85 mm (male) cable
iCBOS2-Vm-7,15,30,60	Typical insertion loss 1.4 dB (7 cm), 1.9 dB (15 cm), 2.5dB (30 cm), 4.2 dB (60 cm)
iCBOS-SMPM-7,15,30,60	67 GHz, 1x8/2x8 O-SMPM (with screw) to SMPM cable
iCBOS2-SMPM-7,15,30,60	Typical insertion loss 1.2 dB (7 cm), 1.9 dB (15 cm), 2.5 dB (30 cm), 4.2 dB (60 cm)
iCBOS-OS-20,30,60,80	67 GHz, 1x8/2x8 O-SMPM (with screw) to 1x8/2x8 O-SMPM (with screw) cable
iCBOS2-OS2-20,30,60,80	Typical insertion loss 2.2 dB (20 cm), 2.5 dB (30 cm), 4.2 dB (60 cm), 5.4 dB (80 cm)
iCBOS2-S1X2-20,30,60,80	67 GHz, 2x8 O-SMPM (with screw) to dual 1x8 O-SMPM (with screw) cable Typical insertion loss 2.2 dB (20 cm), 2.5 dB (30 cm), 4.2 dB (60 cm), 5.4 dB (80 cm)



1X8/2X8 O-SMPM CABLE WITHOUT	۲ SCREW ه. ۵, ۵
iCBOSA-Km-7,15,30,60	40 GHz, 1x8/2x8 O-SMPM (without screw) to K (male) cable
iCBOSA2-Km-7,15,30,60	Typical insertion loss 0.7 dB (7 cm), 1.2 dB (15 cm), 1.7 dB (30 cm), 3.2 dB (60 cm)
iCBOSA-Qm-7,15,30,60	50 GHz, 1x8/2x8 O-SMPM (without screw) to 2.4 mm (male) cable
iCBOSA2-Qm-7,15,30,60	Typical insertion loss 1.0 dB (7 cm), 1.3 dB (15 cm), 2.0 dB (30 cm), 3.5 dB (60 cm)
iCBOSA-Vm-7,15,30,60	67 GHz, 1x8/2x8 O-SMPM (without screw) to 1.85 mm (male) cable
iCBOSA2-Vm-7,15,30,60	Typical insertion loss 1.4 dB (7 cm), 1.9 dB (15 cm), 2.5 dB (30 cm), 4.2 dB (60 cm)
iCBOSA-SMPM-7,15,30,60	67 GHz, 1x8/2x8 O-SMPM (without screw) to SMPM cable
iCBOSA2-SMPM-7,15,30,60	Typical insertion loss 1.2 dB (7 cm), 1.9 dB (15 cm), 2.5 dB (30 cm), 4.2 dB (60 cm)
iCBOSA-OSA-20,30,60,80	67 GHz, 1x8/2x8 O-SMPM (without screw) to 1x8/2x8 O-SMPM (without screw) cable
iCBOSA2-OSA2-20,30,60,80	Typical insertion loss 2.2 dB (20 cm), 2.5 dB (30 cm), 4.2 dB (60 cm), 5.4 dB (80 cm)
iCBOSA2-S1X2-20,30,60,80	67 GHz, 2x8 O-SMPM (without screw) to dual 1x8 O-SMPM (with screw) cable Typical insertion loss 2.2 dB (20 cm), 2.5 dB (30 cm), 4.2 dB (60 cm), 5.4 dB (80 cm)

a. Female coaxial connectors available.

b. Other cable lengths available.

c. Return loss 15 dB.



# **CONNECTOR SPECIFICATIONS**

1X8 CONNECTOR – ELECTRICAL		
Impedance	0 – 67 GHz	50 Ω (nominal)
Return loss	0 – 67 GHz	15 dB (typical)
Insertion loss	0 – 67 GHz	0.2 dB (typical)

# **ORDERING INFORMATION**

1X8 CONNECTOR	
iCNOS8-A	67 GHz, 1x8 O-SMPM connector without screw
iCNOS8-B	67 GHz, 1x8 O-SMPM connector with screw

## 1x8 connector without screw (iCNOS8-A)



# 1x8 connector with screw (iCNOS8-B)





# **CONNECTOR SPECIFICATIONS**

2X8 CONNECTOR – ELECTRICAL		
Impedance	0 – 67 GHz	50 Ω (nominal)
Return loss	0 – 67 GHz	15 dB (typical)
Insertion loss	0 – 67 GHz	0.2 dB (typical)

# **ORDERING INFORMATION**

2X8 CONNECTOR	
iCNOS16-A	67 GHz, 2x8 0-SMPM connector without screw (8 mm pin-to-pin)
iCNOS16-A2	67 GHz, 2x8 0-SMPM connector without screw (16 mm pin-to-pin)
iCNOS16-B	67 GHz, 2x8 0-SMPM connector with screw (8 mm pin-to-pin)

# 2x8 connector without screw (8 mm pin-to-pin) (iCNOS16-A)



# 2x8 connector without screw (16 mm pin-to-pin) (iCNOS16-A2)





#### 2x8 connector with screw (iCNOS16-B)



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