

DC Block

BLK-E653+

50Ω 10 MHz to 65 GHz 1.85mm-Female to 1.85mm-Male

THE BIG DEAL

- · Ultra-wideband, 10MHz to 65 GHz
- Flat response
- Low Insertion Loss, 0.70 dB typ. up to 65 GHz
- Mates with 2.4 mm

APPLICATIONS

- Test and Measurement Instrumentation
- Communication Systems
- Defense Systems



Generic photo used for illustration purposes only

Model No.	Model No. BLK-E653+	
Case Style	DJ2591-1	
Connectors	1.85mm-F to 1.85mm-M	

+RoHS Compliant
The +Suffix identifies RoHS Compliance.
See our website for methodologies and qualifications

PRODUCT OVERVIEW

Mini-Circuits' BLK-E653+ is a coaxial DC Block supporting a wide range of applications from .010 to 65GHz including 5G systems, Ka-Band SatCom, test and measurement and more. This model provides low insertion loss, excellent return loss, RF input handling up to 1 watts and DC voltage handling up to 16V. The unit features 1.85mm-Female connector at one end and 1.85mm-Male connector at the other end and comes housed in a rugged stainless steel body, measuring only 0.31" in diameter and 0.81" in length. Mates with 2.4 mm.

KEY FEATURES

Features	Advantages		
Wideband, 10 MHz to 65 GHz	Wide frequency range up to 65 GHz provides application flexibility and makes this model ideal for broad-band and multi-band use.		
Excellent Return Loss, 22 dB typ	Provides good matching for 50Ω systems and minimizes signal reflections across wide frequency range enabling its use in test and measurement.		
Low Insertion Loss, 0.70 dB typ. up to 65GHz	Provides excellent signal power transmission from input to output.		
Passivated stainless steel construction.	Stands up to wear and tear in demanding test environments and provides excellent reliability.		
Wide operating temperature range, -55 to +100°C	Withstands wide operating conditions.		



BLK-E653+

10 MHz to 65 GHz 1.85mm-Female to 1.85mm-Male 50Ω

ELECTRICAL SPECIFICATIONS AT 25°C

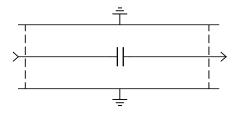
Parameter	Frequency (GHz)	Min.	Тур.	Max.	Units
Frequency Range		0.01		65	GHz
	0.01-40	_	0.6	1.3	
Insertion Loss	40-50	_	0.6	1.3	dB
	40-65	_	0.7	1.3	
Return Loss	0.01-65	12	22	_	dB

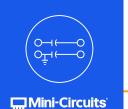
ABSOLUTE MAXIMUM RATINGS

Parameter	Ratings
Operating Case Temperature	-55 °C to +100 °C
Storage Temperature	-55 °C to +100 °C
DC Input Voltage	+16 V
Input Power	+30 dBm

Permanent damage may occur if any of these limits are exceeded.

ELECTRICAL SCHEMATIC





DC Block

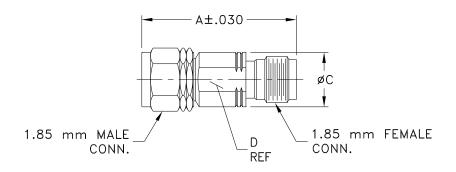
BLK-E653+

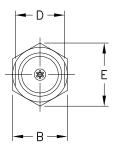
50Ω 10 MHz to 65 GHz 1.85mm-Female to 1.85mm-Male

COAXIAL CONNECTIONS

Port 1	1.85mm-Female
Port 2	1.85mm-Male

OUTLINE DRAWING





OUTLINE DIMENSIONS (Inches)

Α	В	С	D	Ε	wt
0.81	0.31	0.31	0.28	0.36	grams
20.45	8.00	8.00	7.14	9.14	5.6