

SCE1806-0303 DATA SHEET

Low Loss Test TNC Male to TNC Male Cable LL335i Coax and RoHS

The SCE1806-0303 high performance test cable's 0.3 inch diameter and 83% phase velocity offer very low loss performance up to 18 GHz. The durable stainless steel connectors and FEP jacket provide a cost effective design ideal for test environments where a rugged cable assembly is required. The series is offered with Type N, TNC, and SMA connectors all rated to 18 GHz. A heavy duty boot provides improved strain relief and adds to the durability of the cable assemblies. These cable assemblies are built using a double shielded flexible cable, providing excellent shielding effectiveness of greater than 95 dB. All SCE1806-0303 cable assemblies are 100% continuity and RF tested to published specifications. Custom lengths are built to order and shipped same day.

Electrical Specifications

Description	Min	Т	ур	Max	Units		
Frequency Range	DC			18	18 GHz		
VSWR				1.35:1			
Velocity of Propagation	83			%			
RF Shielding	95				dB		
Capacitance		25 [82.02] pF/ft [pF/ft [pF/r	n]	

Performance by Frequency

Description	F1	F2	F3	F4	F5	Units
Frequency	1	2	4.5	9	18	GHz
Insertion Loss (Max.)	0.06	0.08	0.12	0.18	0.26	dB/ft
	[0.2]	[0.26]	[0.39]	[0.59]	[0.85]	[dB/m]
Insertion Loss (Typ.)	0.05	0.07	0.1	0.15	0.22	dB/ft
	[0.16]	[0.23]	[0. <mark>3</mark> 3]	[0.49]	[0.72]	[dB/m]
Power Handling (Max.)2,90 <mark>0</mark>	1,350	<mark>90</mark> 0	650	400	W

Electrical Specification Notes:

Power handling values are calculated based on Cable properties. Power handling will vary based on the actual VSWR of the cable assembly. Insertion Loss does not include the loss of the connectors, insertion loss is estimated as .1dB per connector.

Mechanical Specifications

Cable Assembly	
Diameter	

Cable

Cable Type Impedance Inner Conductor Type Inner Conductor Material and Plating Dielectric Type Number of Shields Shield Layer 1 Shield Layer 2 Shield Layer 3 LL335i 50 Ohms Solid Copper, Silver PTFE 2 Silver Plated Copper Tape Aluminum Polyester Silver Plated Copper Wire

0.625 in [15.88 mm]



Configuration:

- TNC Male
- TNC Male
- LL335i

Features:

- 83% Velocity of Propagation
- Shielding effectiveness 95 dB
- Maximum VSWR is 1.35:1 to 18 GHz
- Minimum Bend Radius of 1.5 inches
- Operating Temperature range of -55 to +125 °C
- ROHS Compliant
- Same day shipment of custom lengths
- 100% Continuity and RF tested

Applications:

- General Purpose
- Test & Measurement
- Laboratory Use

Fairview Microwave 1130 Junction Dr. #100 Allen, TX 75013 Tel: 1-800-715-4396 / (972) 649-6678 Fax: (972) 649-6689 www.fairviewmicrowave.com sales@fairviewmicrowave.com





Outer Conductor Material and Plating	Copper, Silver
Jacket Material	FEP, Green
Jacket Diameter	0.3 in [7.62 mm]

Repeated Minimum Bend Radius

1.5 in [38.1 mm]

Connectors

Description	Connect	or 1	Connector 2		
Туре	TNC Ma	ale	TNC Male		
Specification	MIL-STD-	MIL-STD-348 MIL-STD-348			
Impedance	50 Ohr	ns	50 Ohms		
Contact Material & Plating	Beryllium Cop	per, G <mark>old</mark>	Beryllium Copper, Gold		
Contact Plating Spec.	ASTM-B488	50µ In.	ASTM-B488 50µ In.		
Dielectric Type	PTFE		PTFE		
Outer Cond Material & Plati	ng Passivated Stair	nless Ste	el Passivated Stainless Steel		
Outer Cond Plating Spec.	SAE-AMS-	2701	SAE-AMS-2701		
Body Material & Plating	Passivated Stair	nless <mark>Ste</mark>	el Passivated Stainless Steel		
Body Plating Spec.	SAE-AMS-	2701	SAE-AMS-2701		
Coupling Nut Material & Pla	iting Passivated Stair	nless Ste	el Passivated Stainless Steel		
Coupling Nut Plating Spec.	SAE-AMS-	2701	SAE-AMS-2701		
Hex Size	9/16 In	ich	9/16 Inch		
Torque	14 in-lbs [1.	.58 Nm] 14 in-lbs [1.58 Nm]			

Mechanical Specification Notes:

*All cable assemblies have a length tolerance of 1.5% or $\pm 3/8''$, whichever is greater.

Environmental Specifications

Temperature Operating Range

-55 to +125 deg C

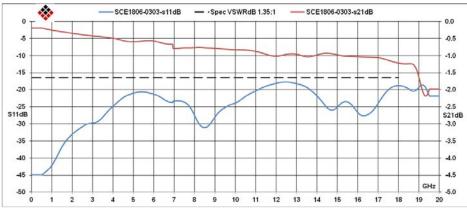
Compliance Certifications (see product page for current document)

Plotted and Other Data

Notes:

• Values at 25°C, sea level.

Typical Performance Data



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How to Order

Part Number Configuration:

SCE1806 - xx



Example: SCE1806-12 = 12 inches long cable SCE1806-100cm = 100 cm long cable

Low Loss Test TNC Male to TNC Male Cable LL335i Coax and RoHS from Fairview Microwave has same day shipment for domestic and International orders. Our RF, microwave and fiber optic products maintain a 99% availability and are part of the broadest selection in the industry.

Click the following link to obtain additional part information: Low Loss Test TNC Male to TNC Male Cable LL335i Coax and RoHS SCE1806-0303

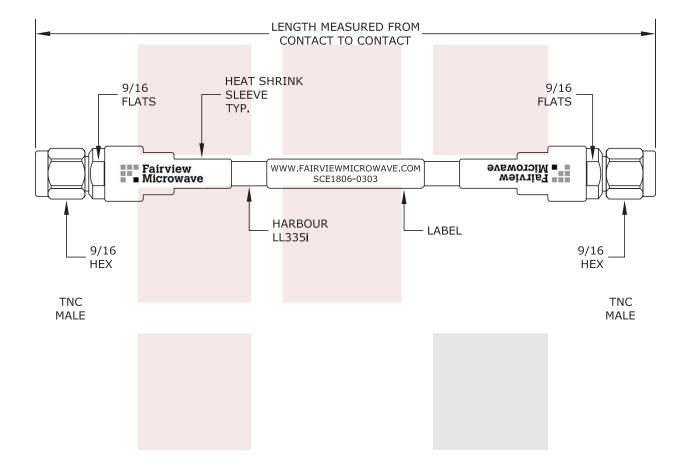
URL: https://www.fairviewmicrowave.com/low-loss-test-tnc-male-tnc-male-cable-ll335i-coax-sce1806-0303-p.aspx

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NOTE:

LABEL FOR CABLE LENGTHS 48" OR SHORTER TO BE CENTERED. 48" OR LONGER WILL BE 12" AWAY FROM CONNECTOR .

FAIRVIEW MICROWAVE INC. ALLEN, TX 75013 WWW.FAIRVIEWMICROWAVE.COM	NOTES: 1. UNLESS OTHERWISE SPECIFIED ALL DIMENSIONS ARE NOMINAL. 2. ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE AT ANY TIME. 3. DIMENSIONS ARE IN INCHES [mm].					
Low Loss Test TNC Male to TNC Male Cable LL335i	DWG NO SCE1806-0303			CAGE CODE 3FKR5		
Coax and RoHS	CAD FILE 121616	SHEET	SCAL	E N/A	SIZE A	2233

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