

# Attenuators (QPL)

## MIL-DTL-3933 Qualified (QPL)

Connectivity for  
Business-Critical Continuity™

- Available in both Non-Screened and Screened versions
- 100% tested to M3933 requirements
- Designed for Harsh Environment / Military Applications
- DC to 18 GHz performance

### Screened Attenuators per Table I of MIL-DTL-3933

Screening Tests:

**Thermal Shock**  
**Pre-Conditioning Electrical:**

DC Resistance  
VSWR

Attenuation

**Conditioning**

**Post-Conditioning Electrical:**

DC Resistance  
VSWR

Attenuation

**Radiographic Inspection**

### Non-Screened Attenuators per Table IV of MIL-DTL-3933

Group A Inspection Tests

**Visual & Mechanical Examination**  
**VSWR**

Attenuation

**Stability of Attenuation:**  
**After Peak Power**

*Note: All Screened Attenuators are tested 100% per Table IV and I of MIL-DTL-3933. All Non-Screened Attenuators are tested 100% per Table IV of MIL-DTL-3933.*

Emerson Connectivity Solutions, Midwest Microwave product line of Qualified Parts List (QPL) attenuators are qualified, manufactured and tested to the strict requirements of the MIL-DTL-M3933 product specification. Our QPL line of M3933/14, /16, /17 and /25 SMA and TNC attenuators are ruggedly constructed to meet your performance needs in the harshest of military environments.

To service your delivery needs, we strive to make most dB values available in short lead times or even off the shelf, for the most common values. If you would like more information, please contact our customer service department at 507.833.8822 or 800.247.8256.

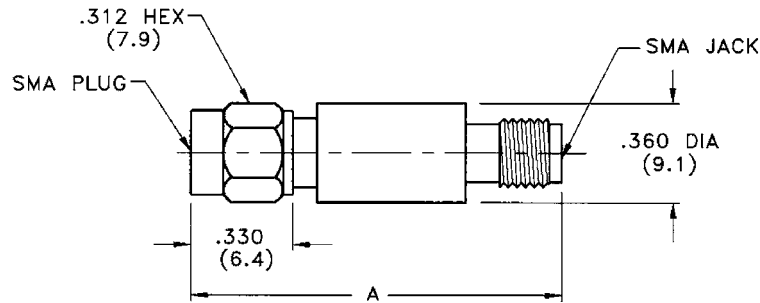


MIL Part Slash No. Group	Description	Frequency (GHz)	Attenuation (dB)
MIL-DTL-3933/25	SMA Subminiature - Male/Female	DC - 4.0, DC - 12.4, DC - 18.0	0 - 20
MIL-DTL-3933/14	SMA Miniature - Male/Female	DC - 12.4	1 - 20
MIL-DTL-3933/16	SMA Miniature - Male/Female	DC - 18.0	0 - 20
MIL-DTL-3933/17	TNC - Male/Female	DC - 4.5, DC - 18.0	1-8, 10, 12, 15, 20

# Attenuators – Fixed Coaxial

MIL-DTL-3933/14

Connectivity for  
Business-Critical Continuity™



Military Part No.	Midwest Part No.	Dimension A inches (mm) (max.)	Attenuation Value (dB) (nom.)	Frequency Range (GHz)	Commercial Alternate
-01	M3933/14-01N	1.20 (30.5)	3.0	DC - 12.4	ATT-0205-03-SMA-02
-02	M3933/14-02N	1.20 (30.5)	6.0	DC - 12.4	ATT-0205-06-SMA-02
-03	M3933/14-03N	1.20 (30.5)	10.0	DC - 12.4	ATT-0205-10-SMA-02
-04	M3933/14-04N	1.20 (30.5)	20.0	DC - 12.4	ATT-0205-20-SMA-02
-05	M3933/14-05N	1.20 (30.5)	15.0	DC - 12.4	ATT-0205-15-SMA-02
-06	M3933/14-06N	1.20 (30.5)	1.0	DC - 12.4	ATT-0205-01-SMA-02
-07	M3933/14-07N	1.20 (30.5)	2.0	DC - 12.4	ATT-0205-02-SMA-02
-08	M3933/14-08N	1.20 (30.5)	4.0	DC - 12.4	ATT-0205-04-SMA-02
-09	M3933/14-09N	1.20 (30.5)	5.0	DC - 12.4	ATT-0205-05-SMA-02
-10	M3933/14-10N	1.20 (30.5)	7.0	DC - 12.4	ATT-0205-07-SMA-02
-11	M3933/14-11N	1.20 (30.5)	8.0	DC - 12.4	ATT-0205-08-SMA-02
-12	M3933/14-12N	1.20 (30.5)	9.0	DC - 12.4	ATT-0205-09-SMA-02
-18	M3933/14-18N	1.20 (30.5)	16.0	DC - 12.4	ATT-0205-16-SMA-02
-19	M3933/14-19N	1.20 (30.5)	14.0	DC - 12.4	ATT-0205-14-SMA-02
-20	M3933/14-20N	1.20 (30.5)	13.0	DC - 12.4	ATT-0205-13-SMA-02
-21	M3933/14-21N	1.20 (30.5)	12.0	DC - 12.4	ATT-0205-12-SMA-02
-22	M3933/14-22N	1.20 (30.5)	11.0	DC - 12.4	ATT-0205-11-SMA-02
-23	M3933/14-23N	1.20 (30.5)	1.5	DC - 12.4	ATT-0205-72-SMA-02

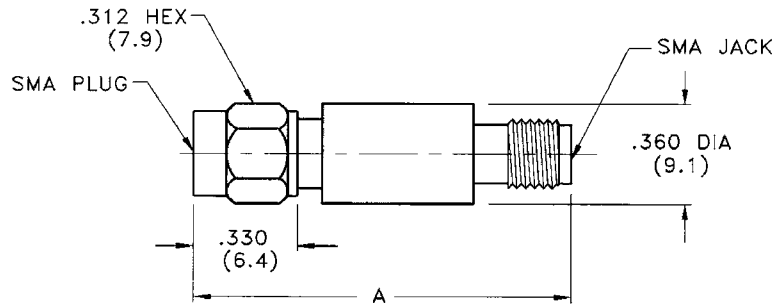
**Note:**

Midwest Microwave part number reflects a non-screened part. For a screened part, change suffix "N" to "S".

# Attenuators – Fixed Coaxials

MIL-DTL-3933/16

Connectivity for  
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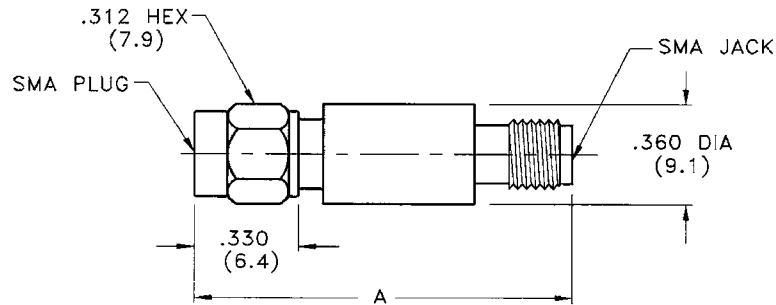
Military Part No.	Midwest Part No.	Dimension A inches (mm) (max.)	Attenuation Value (dB) (nom.)	Frequency Range (GHz)	Commercial Alternate
-01	M3933/16-01N	1.20 (30.5)	3.0	DC - 18.0	ATT-0263-03-SMA-02
-02	M3933/16-02N	1.20 (30.5)	6.0	DC - 18.0	ATT-0263-06-SMA-02
-03	M3933/16-03N	1.20 (30.5)	10.0	DC - 18.0	ATT-0263-10-SMA-02
-04	M3933/16-04N	1.20 (30.5)	20.0	DC - 18.0	ATT-0263-20-SMA-02
-05	M3933/16-05N	1.20 (30.5)	1.0	DC - 18.0	ATT-0263-01-SMA-02
-06	M3933/16-06N	1.20 (30.5)	2.0	DC - 18.0	ATT-0263-02-SMA-02
-07	M3933/16-07N	1.20 (30.5)	4.0	DC - 18.0	ATT-0263-04-SMA-02
-08	M3933/16-08N	1.20 (30.5)	5.0	DC - 18.0	ATT-0263-05-SMA-02
-09	M3933/16-09N	1.20 (30.5)	7.0	DC - 18.0	ATT-0263-07-SMA-02
-10	M3933/16-10N	1.20 (30.5)	8.0	DC - 18.0	ATT-0263-08-SMA-02
-11	M3933/16-11N	1.20 (30.5)	9.0	DC - 18.0	ATT-0263-09-SMA-02
-16	M3933/16-16N	1.20 (30.5)	0	DC - 18.0	ATT-0263-00-SMA-02
-17	M3933/16-17N	1.20 (30.5)	0.5	DC - 18.0	ATT-0263-70-SMA-02
-18	M3933/16-18N	1.20 (30.5)	1.5	DC - 18.0	ATT-0263-71-SMA-02
-19	M3933/16-19N	1.20 (30.5)	2.5	DC - 18.0	ATT-0263-72-SMA-02
-20	M3933/16-20N	1.20 (30.5)	3.5	DC - 18.0	ATT-0263-73-SMA-02
-21	M3933/16-21N	1.20 (30.5)	4.5	DC - 18.0	ATT-0263-74-SMA-02
-22	M3933/16-22N	1.20 (30.0)	5.5	DC - 18.0	ATT-0263-75-SMA-02
-23	M3933/16-23N	1.20 (30.5)	6.5	DC - 18.0	ATT-0263-76-SMA-02
-24	M3933/16-24N	1.20 (30.5)	7.5	DC - 18.0	ATT-0263-77-SMA-02
-25	M3933/16-25N	1.20 (30.5)	8.5	DC - 18.0	ATT-0263-78-SMA-02
-26	M3933/16-26N	1.20 (30.5)	9.5	DC - 18.0	ATT-0263-79-SMA-02
-27	M3933/16-27N	1.20 (30.5)	10.5	DC - 18.0	ATT-0263-80-SMA-02
-28	M3933/16-28N	1.20 (30.5)	11.0	DC - 18.0	ATT-0263-11-SMA-02

Note:  
Midwest Microwave part number reflects a non-screened part. For a screened part, change suffix "N" to "S".

# Attenuators – Fixed Coaxial

## MIL-DTL-3933/16

Connectivity for  
Business-Critical Continuity™



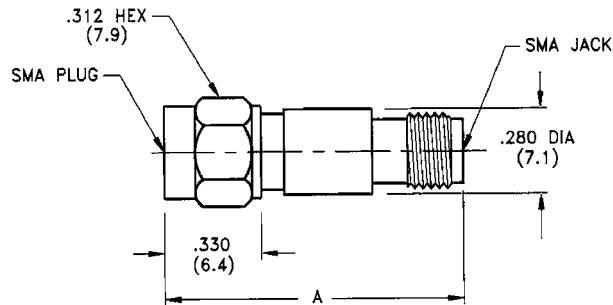
Military Part No.	Midwest Part No.	Dimension A inches (mm) (max.)	Attenuation Value (dB) (nom.)	Frequency Range (GHz)	Commercial Alternate
-29	M3933/16-29N	1.20 (30.5)	11.5	DC - 18.0	ATT-0263-81-SMA-02
-30	M3933/16-30N	1.20 (30.5)	12.0	DC - 18.0	ATT-0263-12-SMA-02
-31	M3933/16-31N	1.20 (30.5)	12.5	DC - 18.0	ATT-0263-82-SMA-02
-32	M3933/16-32N	1.20 (30.5)	13.0	DC - 18.0	ATT-0263-13-SMA-02
-33	M3933/16-33N	1.20 (30.5)	13.5	DC - 18.0	ATT-0263-83-SMA-02
-34	M3933/16-34N	1.20 (30.5)	14.0	DC - 18.0	ATT-0263-14-SMA-02
-35	M3933/16-35N	1.20 (30.5)	14.5	DC - 18.0	ATT-0263-84-SMA-02
-36	M3933/16-36N	1.20 (30.0)	15.0	DC - 18.0	ATT-0263-15-SMA-02
-37	M3933/16-37N	1.20 (30.5)	15.5	DC - 18.0	ATT-0263-85-SMA-02
-38	M3933/16-38N	1.20 (30.5)	16.0	DC - 18.0	ATT-0263-16-SMA-02
-39	M3933/16-39N	1.20 (30.5)	16.5	DC - 18.0	ATT-0263-86-SMA-02
-40	M3933/16-40N	1.20 (30.5)	17.0	DC - 18.0	ATT-0263-17-SMA-02
-41	M3933/16-41N	1.20 (30.5)	17.5	DC - 18.0	ATT-0263-87-SMA-02
-42	M3933/16-42N	1.20 (30.5)	18.0	DC - 18.0	ATT-0263-18-SMA-02
-43	M3933/16-43N	1.20 (30.5)	18.5	DC - 18.0	ATT-0263-88-SMA-02
-44	M3933/16-44N	1.20 (30.5)	19.0	DC - 18.0	ATT-0263-19-SMA-02
-45	M3933/16-45N	1.20 (30.5)	19.5	DC - 18.0	ATT-0263-89-SMA-02

Note:  
Midwest Microwave part number reflects a non-screened part. For a screened part, change suffix "N" to "S".

# Attenuators – Fixed Coaxial

MIL-DTL-3933/25

Connectivity for  
Business-Critical Continuity™



Military Part No.	Midwest Part No.	Dimension A inches (mm) (max.)	Attenuation Value (dB) (nom.)	Frequency Range (GHz)	Commercial Alternate
-01	M3933/25-01N	0.86 (21.9)	1.0	DC - 2.0	ATT-0294-01-SMA-02
-02	M3933/25-02N	0.86 (21.9)	2.0	DC - 2.0	ATT-0294-02-SMA-02
-03	M3933/25-03N	0.86 (21.9)	3.0	DC - 2.0	ATT-0294-03-SMA-02
-04	M3933/25-04N	0.86 (21.9)	4.0	DC - 2.0	ATT-0294-04-SMA-02
-05	M3933/25-05N	0.86 (21.9)	5.0	DC - 2.0	ATT-0294-05-SMA-02
-06	M3933/25-06N	0.86 (21.9)	6.0	DC - 2.0	ATT-0294-06-SMA-02
-07	M3933/25-07N	0.86 (21.9)	7.0	DC - 2.0	ATT-0294-07-SMA-02
-08	M3933/25-08N	0.86 (21.9)	8.0	DC - 2.0	ATT-0294-08-SMA-02
-09	M3933/25-09N	0.86 (21.9)	9.0	DC - 2.0	ATT-0294-09-SMA-02
-10	M3933/25-10N	0.86 (21.9)	10.0	DC - 2.0	ATT-0294-10-SMA-02
-11	M3933/25-11N	0.86 (21.9)	11.0	DC - 2.0	ATT-0294-11-SMA-02
-12	M3933/25-12N	0.86 (21.9)	12.0	DC - 2.0	ATT-0294-12-SMA-02
-13	M3933/25-13N	1.02 (26.0)	13.0	DC - 2.0	ATT-0294-13-SMA-02
-14	M3933/25-14N	1.02 (26.0)	14.0	DC - 2.0	ATT-0294-14-SMA-02
-15	M3933/25-15N	1.02 (26.0)	15.0	DC - 2.0	ATT-0294-15-SMA-02
-16	M3933/25-16N	1.02 (26.0)	16.0	DC - 2.0	ATT-0294-16-SMA-02
-17	M3933/25-17N	1.02 (26.0)	17.0	DC - 2.0	ATT-0294-17-SMA-02
-18	M3933/25-18N	1.02 (26.0)	18.0	DC - 2.0	ATT-0294-18-SMA-02
-19	M3933/25-19N	1.02 (26.0)	19.0	DC - 2.0	ATT-0294-19-SMA-02
-20	M3933/25-20N	1.02 (26.0)	20.0	DC - 2.0	ATT-0294-20-SMA-02
-27	M3933/25-27N	0.86 (21.9)	1.0	DC - 12.4	ATT-0291-01-SMA-02
-28	M3933/25-28N	0.86 (21.9)	2.0	DC - 12.4	ATT-0291-02-SMA-02
-29	M3933/25-29N	0.86 (21.9)	3.0	DC - 12.4	ATT-0291-03-SMA-02
-30	M3933/25-30N	0.86 (21.9)	4.0	DC - 12.4	ATT-0291-04-SMA-02
-31	M3933/25-31N	0.86 (21.9)	5.0	DC - 12.4	ATT-0291-05-SMA-02
-32	M3933/25-32N	0.86 (21.9)	6.0	DC - 12.4	ATT-0291-06-SMA-02
-33	M3933/25-33N	0.86 (21.9)	7.0	DC - 12.4	ATT-0291-07-SMA-02
-34	M3933/25-34N	0.86 (21.9)	8.0	DC - 12.4	ATT-0291-08-SMA-02
-35	M3933/25-35N	0.86 (21.9)	9.0	DC - 12.4	ATT-0291-09-SMA-02

Note:  
Midwest Microwave part number reflects a non-screened part. For a screened part, change suffix "N" to "S".

# Attenuators – Fixed Coaxial

## MIL-DTL-3933/25 (Continued from previous page)

Connectivity for  
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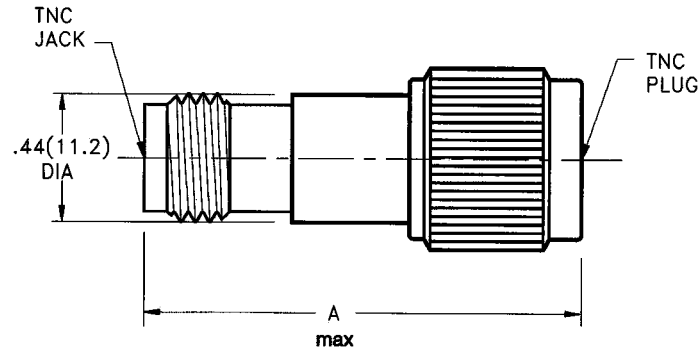
Military Part No.	Midwest Part No.	Dimension A – inches (mm) (max.)	Attenuation Value (dB) (nom.)	Frequency Range (GHz)	Commercial Alternate
- 36	M3933/25-36N	0.86 (21.9)	10.0	DC - 12.4	ATT-0291-10-SMA-02
- 37	M3933/25-37N	0.86 (21.9)	11.0	DC - 12.4	ATT-0291-11-SMA-02
- 38	M3933/25-38N	0.86 (21.9)	12.0	DC - 12.4	ATT-0291-12-SMA-02
- 39	M3933/25-39N	0.94 (23.9)	13.0	DC - 12.4	ATT-0291-13-SMA-02
- 40	M3933/25-40N	0.94 (23.9)	14.0	DC - 12.4	ATT-0291-14-SMA-02
- 41	M3933/25-41N	0.94 (23.9)	15.0	DC - 12.4	ATT-0291-15-SMA-02
- 42	M3933/25-42N	0.94 (23.9)	16.0	DC - 12.4	ATT-0291-16-SMA-02
- 43	M3933/25-43N	0.94 (23.9)	17.0	DC - 12.4	ATT-0291-17-SMA-02
- 44	M3933/25-44N	0.94 (23.9)	18.0	DC - 12.4	ATT-0291-18-SMA-02
- 45	M3933/25-45N	0.94 (23.9)	19.0	DC - 12.4	ATT-0291-19-SMA-02
- 46	M3933/25-46N	1.02 (26.0)	20.0	DC - 12.4	ATT-0291-20-SMA-02
- 58	M3933/25-58N	0.86 (21.9)	0	DC - 18.0	ATT-0290-00-SMA-02
- 59	M3933/25-59N	0.86 (21.9)	0.5	DC - 18.0	ATT-0290-70-SMA-02
- 60	M3933/25-60N	0.86 (21.9)	1.0	DC - 18.0	ATT-0290-01-SMA-02
- 61	M3933/25-61N	0.86 (21.9)	1.5	DC - 18.0	ATT-0290-71-SMA-02
- 62	M3933/25-62N	0.86 (21.9)	2.0	DC - 18.0	ATT-0290-02-SMA-02
- 63	M3933/25-63N	0.86 (21.9)	2.0	DC - 18.0	ATT-0290-72-SMA-02
- 64	M3933/25-64N	0.86 (21.9)	3.0	DC - 18.0	ATT-0290-03-SMA-02
- 65	M3933/25-65N	0.86 (21.9)	3.5	DC - 18.0	ATT-0290-73-SMA-02
- 66	M3933/25-66N	0.86 (21.9)	4.0	DC - 18.0	ATT-0290-04-SMA-02
- 67	M3933/25-67N	0.86 (21.9)	4.5	DC - 18.0	ATT-0290-74-SMA-02
- 68	M3933/25-68N	0.86 (21.9)	5.0	DC - 18.0	ATT-0290-05-SMA-02
- 69	M3933/25-69N	0.86 (21.9)	5.5	DC - 18.0	ATT-0290-75-SMA-02
- 70	M3933/25-70N	0.86 (21.9)	6.0	DC - 18.0	ATT-0290-06-SMA-02
- 71	M3933/25-71N	0.86 (21.9)	6.5	DC - 18.0	ATT-0290-76-SMA-02
- 72	M3933/25-72N	0.86 (21.9)	7.0	DC - 18.0	ATT-0290-07-SMA-02
- 73	M3933/25-73N	0.86 (21.9)	7.5	DC - 18.0	ATT-0290-77-SMA-02
- 74	M3933/25-74N	0.86 (21.9)	8.0	DC - 18.0	ATT-0290-08-SMA-02
- 75	M3933/25-75N	0.86 (21.9)	8.5	DC - 18.0	ATT-0290-78-SMA-02
- 76	M3933/25-76N	0.86 (21.9)	9.0	DC - 18.0	ATT-0290-09-SMA-02
- 77	M3933/25-77N	0.86 (21.9)	9.5	DC - 18.0	ATT-0290-79-SMA-02
- 78	M3933/25-78N	0.86 (21.9)	10.0	DC - 18.0	ATT-0290-10-SMA-02
- 79	M3933/25-79N	0.86 (21.9)	11.0	DC - 18.0	ATT-0290-11-SMA-02
- 80	M3933/25-80N	0.86 (21.9)	12.0	DC - 18.0	ATT-0290-12-SMA-02
- 81	M3933/25-81N	0.94 (23.9)	13.0	DC - 18.0	ATT-0290-13-SMA-02
- 82	M3933/25-82N	0.94 (23.9)	14.0	DC - 18.0	ATT-0290-14-SMA-02
- 83	M3933/25-83N	1.02 (26.0)	15.0	DC - 18.0	ATT-0290-15-SMA-02
- 84	M3933/25-84N	1.02 (26.0)	16.0	DC - 18.0	ATT-0290-16-SMA-02
- 85	M3933/25-85N	1.02 (26.0)	17.0	DC - 18.0	ATT-0290-17-SMA-02
- 86	M3933/25-86N	1.02 (26.0)	18.0	DC - 18.0	ATT-0290-18-SMA-02
- 87	M3933/25-87N	1.02 (26.0)	19.0	DC - 18.0	ATT-0290-19-SMA-02
- 88	M3933/25-88N	1.02 (26.0)	20.0	DC - 18.0	ATT-0290-20-SMA-02

Note:  
Midwest Microwave part number reflects a non-screened part. For a screened part, change suffix "N" to "S".

# Attenuators-TNC Type-Fixed Coaxial

Connectivity for  
Business-Critical Continuity™

MMIL-DTL-3933/17



Military Part No.	Midwest Part No.	Dimension A inches (mm) (max.)	Attenuation Value (dB) (nom.)	Frequency Range (GHz)	Commercial Alternate
-01	M3933/17-01N	1.57 (39.9)	1.0	DC - 4.5	ATT-0224-01-TNC-02
-02	M3933/17-02N	1.57 (39.9)	2.0	DC - 4.5	ATT-0224-02-TNC-02
-03	M3933/17-03N	1.57 (39.9)	3.0	DC - 4.5	ATT-0224-03-TNC-02
-04	M3933/17-04N	1.57 (39.9)	4.0	DC - 4.5	ATT-0224-04-TNC-02
-05	M3933/17-05N	1.57 (39.9)	5.0	DC - 4.5	ATT-0224-05-TNC-02
-06	M3933/17-06N	1.57 (39.9)	6.0	DC - 4.5	ATT-0224-06-TNC-02
-07	M3933/17-07N	1.57 (39.9)	20.0	DC - 18.0	ATT-0225-20-TNC-02
-09	M3933/17-09N	1.57 (39.9)	1.0	DC - 18.0	ATT-0225-01-TNC-02
-10	M3933/17-10N	1.57 (39.9)	2.0	DC - 18.0	ATT-0225-02-TNC-02
-11	M3933/17-11N	1.57 (39.9)	3.0	DC - 18.0	ATT-0225-03-TNC-02
-12	M3933/17-12N	1.57 (39.9)	4.0	DC - 18.0	ATT-0225-04-TNC-02
-13	M3933/17-13N	1.57 (39.9)	5.0	DC - 18.0	ATT-0225-05-TNC-02
-14	M3933/17-14N	1.57 (39.9)	6.0	DC - 18.0	ATT-0225-06-TNC-02
-15	M3933/17-15N	1.57 (39.9)	7.0	DC - 18.0	ATT-0225-07-TNC-02
-16	M3933/17-16N	1.57 (39.9)	8.0	DC - 18.0	ATT-0225-08-TNC-02
-17	M3933/17-17N	1.57 (39.9)	10.0	DC - 18.0	ATT-0225-10-TNC-02
-18	M3933/17-18N	1.57 (39.9)	12.0	DC - 18.0	ATT-0225-12-TNC-02
-19	M3933/17-19N	1.57 (39.9)	15.0	DC - 18.0	ATT-0225-15-TNC-02

**Note:**

Midwest Microwave part number reflects a non-screened part. For a screened part, change suffix "N" to "S".

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## About Emerson Network Power Connectivity Solutions

Emerson Network Power Connectivity Solutions, an Emerson business, serves the needs of wireless communications, military, telephony and data networks, CATV security systems, health care, military and industrial facilities with a full spectrum of RF/microwave and fiber optic connectivity products. For more information, visit [www.EmersonConnectivity.com](http://www.EmersonConnectivity.com)

## About Emerson

Emerson (NYSE: EMR), based in St. Louis, is a global leader in bringing technology and engineering together to provide innovative solutions to customers through its network power, process management, industrial automation, climate technologies, and appliance and tools businesses. For more information, visit [www.Emerson.com](http://www.Emerson.com)



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