# SV MICROWAVE®

**RF Connectors & Components** 

# 39030













SV Microwave is a leading qualified source for MIL-PRF-39030 Terminations including:

MIL-DTL-39030/3 SMA Terminations

MIL-DTL-39030/5 TNC Terminations
MIL-DTL-39030/7 BNC Terminations

MIL-DTL-39030/20 Stripline Terminations (Low Power)

MIL-DTL-39030/21 Stripline Terminations (Medium Power)

### MIL-DTL-39030/3 SMA Terminations

SV Microwave offers military SMA terminations that are 39030 approved. QPL-39030 parts are designed and made under DSCC qualifications in order to resist harsh environments within military applications.

SMA terminations operate under low power and frequency rance up to 19 GHz. These terminations are used in military applications due to their high performance, compact size, and outstanding mechanical durability. Built in accordance with MIL-PRF-39030, SMA terminations can be mated with all connectors that meet these spec mating diameters regardless of manufacturer.

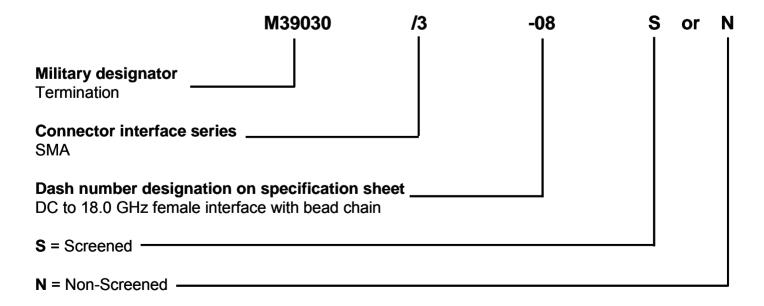
### **Features & Benefits**

- Broadband performance up to 19 GHz
- Nominal impedance up to 95 Ohms
- Terminations in accordance with MIL-DTL-39030

# **Applications**

- Military Systems
- Test and Instrumentation
- Base Stations
- Telecom

To more easily illustrate the ordering procedure for SV Microwave QPL Attenuators, part number **M39030/3-08S** is shown below.



# MIL-DTL-39030/3 SMA Dash numbers and characteristics

Dash	Operating	VSWR	Power handling capability (max)		Nominal characteristic		Bead	Lock	
number N and S	frequency (GHz)	(max)	Average (watts)	Peak (watts)	impedance (ohms)	Sex	chain	wire holes	Finish
01, 16	DC to 18	(1.05 +.010f):1	.5	50	50	M			Gold
02, 17	DC to 18	(1.05 +.010f):1	.5	50	50	M			Passivated
03, 18	DC to 18	(1.05 +.010f):1	.5	50	50	M	✓		Gold
04, 19	DC to 18	(1.05 +.010f):1	.5	50	50	M	✓		Passivated
05	DC to 18	(1.05 +.010f):1	.5	50	50	F			Gold
06	DC to 18	(1.05 +.010f):1	.5	50	50	F			Passivated
07	DC to 18	(1.05 +.010f):1	.5	50	50	F	✓		Gold
08	DC to 18	(1.05 +.010f):1	.5	50	50	F	✓		Passivated
09, 20	DC to 10	1.10:1	1.0	100	50	M		<b>√</b>	Gold
10, 21	DC to 10	2.10:1	2.0	200	95	M		<b>\</b>	Gold
11, 22	DC to 18	1.15:1	1.0	100	50	M			Gold
12, 23	2 to 19	1.30:1	1.0	100	50	M		<b>√</b>	Gold
13, 24	2 to 19	1.30:1	.5	50	50	M	✓	<b>√</b>	Gold
14, 25	2 to 19	1.30:1	1.0	100	75	M		<b>√</b>	Gold
15, 26	4.4 to 5.0	(1.025 +.005f):1	.5	50	50	M			Gold

# **S**pecifications

**Material** 

Body and connector Corrosion-resistant steel per SAE-AMS-QQ-S-763 or

ASTM A484/A484M and ASTM A582

Contact pin and socket Bead chain and lug

Beryllium copper per ASTM B194, ASTM B196, or ASTM B197

Corrosion-resistant steel or plastic

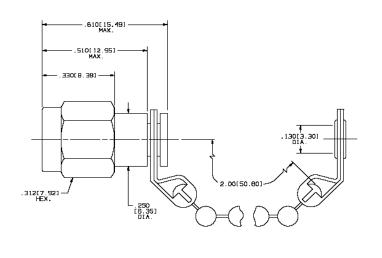
**Finish** 

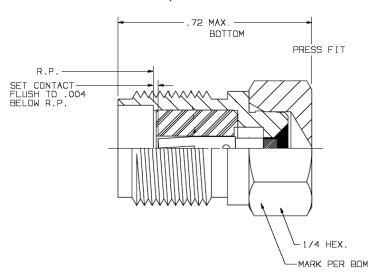
Body and connector

Gold plated per ASTM B488, type 3, grade C, class 1.27 or Passivated per ASTM

A967 or SAE-AMS-QQ-P-35

Contact pin and socket ASTM B488, type II, code C, class 1.27, Nickel per SAE-AMS-QQ-N-290, class I





### MIL-DTL-39030/5 TNC Terminations

SV Microwave manufactures TNC terminations in accordance with MIL-DTL-39030. Military qualified TNC terminations are rated up to 5 watts average power, constant impedance of 75 Ohms and operate from 0.3 to 12.4 GHz. TNC terminations feature a threaded coupling that offers extra mating stability.

### **Features & Benefits**

- Frequency range .03 to 12.4 GHz
- Nominal impedance 50 and 75 Ohms
- Terminations in accordance with MIL-DTL-39030

# **Applications**

Antennas

Components

Cellular

Networks

Mil-Aero

Cable Assembly

Telecom

Instrumentation

Base Stations

Radar

To more easily illustrate the ordering procedure for SV Microwave QPL Attenuators, part number **M39030/5-03N** is shown below.

	M39030	/5	-03	S or N
Military designator Termination				
Connector interface series				
Dash number designation on specific DC to 10.0 GHz with average power		ad chain		
<b>S</b> = Screened				
N = Non-Screened ————				

# MIL-DTL-39030/5 TNC Dash numbers and characteristics

Dash number	Operating frequency	VSWR	Power handling capability (max)		Nominal characteristics	Sex	Bead chain
N and S (GHz)		( max )	Average (watts)	Peak (watts)	Impedance (ohms)	Sex	
01	DC to 10.0	1.40:1	5.0	3.5K	50	Male	
02	.06 to .08	1.12:1	.5	.6K	75	Male	
03	DC to 10.0	1.15:1	2.0	2.5K	50	Male	✓
04	DC to 10.0	1.05:1 (DC to 2.4 GHz) 1.20:1 (2.4 to10.0 GHz)	5.0	3.5K	50	Male	
05	DC to 11.0	1.10:1	3.0	1K	51	Male	✓
06	.03 to 12.4	1.15:1	1.0	1.2K	50	Male	
07	.03 to 12.4	1.15:1	1.0	1.2K	50	Female	

# **Specifications**

Bead chain and lug

		4			п
М	9	T 3	е	19	ı
ши		u			ı

Body and connector Corrosion-resistant steel per SAE-AMS-QQ-S-763 or ASTM A484/A484M and

ASTM A582

Contact pin and socket Beryllium copper per ASTM B194, ASTM B196, or ASTM B197/B197M

Corrosion-resistant steel or plastic

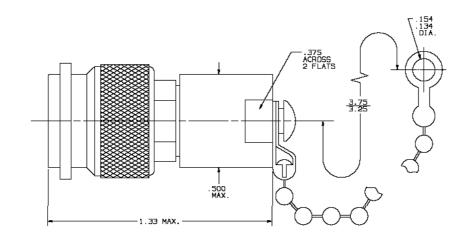
**Finish** 

Body and connector Gold plated per ASTM B488, type 3 class 1.27 or Nickel plated per with

SAE-AMS-QQ-N-290, class 1 or Passivated per ASTM-A967 or SAE-AMS2700

Contact pin and socket Gold plated ASTM B488, type II, code C, class 1.27

Nickel per SAE-AMS-QQ-N-290, class 1



### MIL-DTL-39030/7 BNC Terminations

SV Microwave is the only qualified source for terminations in accordance with MIL-DTL-39030/7. Our military qualified BNC terminations are lightweight and designed to operate at DC to 2.5 GHz with nominal impedance of 50 - 600 Ohm. BNC terminations feature a bayonet coupling mechanism for quick mating and unmating. These terminations can accommodate a large variety of RG type and industry standard cables.

### **Features & Benefits**

- Quick mating/unmating bayonet coupling mechanism
- Durable and light weight
- 50 600 Ohm Nominal Impedance

## **Applications**

- Military Systems
- Radio Communications
- Antennas
- Base Stations

- Telecom
- Medical equipment
- Test and Instrumentation

To more easily illustrate the ordering procedure for SV Microwave QPL Attenuators, part number **M39030/7-04N** is shown below.

	M39030	<i>l</i> 7	-04	S or N
Military designator Termination				
Connector interface series				
Dash number designation on specific DC to .25 GHz with nom. impedance		ead chain		
S = Screened				
N = Non-Screened —				

## MIL-DTL-39030/7 BNC Dash numbers and characteristics

Dash number	Operating frequency (GHz)	VSWR (max)	Power ha capability Average (watts)		Nominal characteristic impedance (ohms)	Sex	Bead chain
01	DC to .25	1.10:1	.5	1.0K	75	Male	✓
02	DC to .25	1.10:1	.5	1.0K	93	Male	✓
03	DC to .25	1.10:1	.5	1.0K	100	Male	✓
04	DC to .25	1.10:1	.5	1.0K	600	Male	✓
05	DC to 2.5	1.15:1	2.0	1.0K	50	Male	
06	DC to 2.5	1.15:1	2.0	1.0K	50	Female	

# **Specifications**

### Material

Body and connector Corrosion-resistant steel per SAE-AMS-QQ-S-763 (dash numbers 01 thru 04)

Brass per ASTM B121, ASTM B36, ASTM B16, ASTM B16M and ASTM B124

(dash numbers 05 and 06)

Contact pin and socket Bead chain and lug

Beryllium copper per ASTM B196, ASTM B197, or ASTM B194

Corrosion-resistant steel or plastic

### Finish

Body, connector, contact pin and socket

Gold plated per ASTM B488, type 3 class 1.27 or Nickel plated per with SAE-AMS-QQ-N-290, class 1

