

**CABLE CONSTRUCTION**

1. FEP Jacket (Clear)
2. Silver-Plated Copper Shield
3. Silver-Plated Copper Strip Braid
4. PTFE Dielectric
5. Silver-Plated Copper Conductor



Designed as a lightweight replacement for M17/128-RG400, S86208 is two-thirds the diameter and less than half the weight — 20 lbs vs 43 lbs per 1,000 ft. for RG400. This is accomplished through the use of a low-loss PTFE expanded-tape dielectric between the center conductor and the shield. In addition, the inner braid is a silver-plated copper strip braid, offering improved shielding and greater strength than conventional wire braid.

Attenuation figures are approximately 20% better than RG400. An FEP jacket protects the cable against abrasion and environmental effects while maintaining flexibility for ease of installation.

S86208 has been approved by Honeywell for the Apex/Epic System. It is Skydrol resistant, RoHS compliant and meets the FAA flammability requirements of FAR Part 23 and 25, Appendix F; complies with MIL-C-17 as applicable.

**PHYSICAL DATA**

- Conductor 21 AWG Stranded SPC
- Operating Temperature -55° to +200°C
- Outer Diameter: in (mm) 0.13 (3.30)
- Minimum Bend Radius: in (mm) 0.65 (16.51)
- Weight: lbs/100 ft (kg/100 m) 2.0 (2.9)

**ELECTRICAL DATA**

- Impedance: ohms 50
- Capacitance: pF/ft (m) 25.0 (82.0)
- Velocity of Propagation: % 80.0
- Time Delay: ns/ft (m) 1.27 (4.17)
- RF Shielding Effectiveness: dB/min -80
- DC Resistance: ohms/1000 ft (m) 11.6 (38.1)
- Attenuation: Nom / Max dB/100 ft (dB/100 m)
  - @400 MHz 8.9 / 9.8 (29.2 / 32.2)
  - @1.0 GHz 14.1 / 15.5 (46.3 / 50.9)
  - @1.6 GHz 17.9 / 19.7 (58.7 / 64.6)
  - @5.0 GHz 32.0 / 35.2 (105.0 / 115.5)
- K Values (nom loss): K1 = 0.44, K2 = 0.000179
- Formula for Attenuation:  $(K1 * \sqrt{F(MHz)}) + (K2 * F(MHz))$

*All values nominal unless otherwise noted*

PIC P/N	CONNECTOR TYPE	PIC P/N	CONNECTOR TYPE
<b>ARINC</b>			
190819	404 Size 1	190803	404/600 Size 5
190801	600 Size 1	190837	Size 8 Pin
190802	600 Modified Size 1	190829	Size 8 Socket

<b>D-SUB</b>			
110286	Size 8 Pin		
110260	Precision 50 ohm Size 8 Pin		
110212	Size 8 Socket		

**M39029 for MIL-C-38999 Connector**

190838 / 190838-01	Size 8 Pin : w/Enviro Seal (-01)		
190839 / 190839-01	Size 8 Socket : w/Enviro Seal (-01)		
190866	Size 12 Pin		
190867	Size 12 Socket		

**M39012**

PIC P/N	CONNECTOR TYPE	PIC P/N	CONNECTOR TYPE
190812	BNC Straight Plug	110566	QMA Straight Plug
190813	BNC 90° Plug	110567	QMA 90° Plug
190827	BNC Inline Jack	190814	SMA Straight Plug
190806	C Straight Plug	190815	SMA 90° Plug
190807	C 90° Plug	190825	SMA Inline Jack
190805	HN 90° Plug	190808	TNC Straight Plug
190810	N Straight Plug	190809	TNC 90° Plug
190811	N 90° Plug	190809-L	TNC 90° Plug (Long)
190822	N Bulkhead Jack	190823	TNC Inline Jack
		190821	TNC Bulkhead Jack

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Refer To Connector Drawing For Tooling  
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