

r.f. connectors & components. Greenpar



Series BNC

Introduction

Series BNC which are small bayonet-lock, coaxial connectors, are probably the most widely used of all.

The Greenpar range is particularly extensive, covering numerous different cable and chassis mounting styles, and including many U.S. MIL spec. types, as well as Post Office and Greenpar proprietary designs.

Greenpar Series BNC connectors are manufactured to ensure compatibility with the latest British Standard and IEC mating face requirements, and they are thus fully interchangeable with connectors manufactured both to these specifications, and to U.S. Specification MIL-C-39012.

Connectors are available in both 50- and 75-ohm impedance versions for use with cables up to 9mm. diameter. Additionally, certain items can be supplied for use with larger cables.

In addition to the standard BNC range, details are also given of modified BNC connectors for high voltage use, and for 'push-on' mating.

Greenpar series BNC 50 ohm and 75 ohm connectors are interchangeable.

Performance

Standard BNC

VSWR (typical): less than 1.2 up to 4GHz

Working voltage: 500V peak

Proof voltage: 2000V peak

Ambient temperature range: -55°C to +150°C

High voltage BNC

VSWR (typical): less than 1.4 up to 4GHz

Working voltage: 3,000V peak

Proof voltage: 6,000V d.c. single connector; 10,000V d.c. mated pair

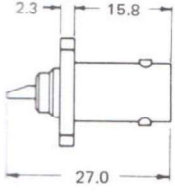
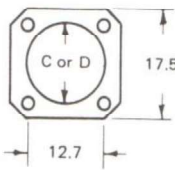
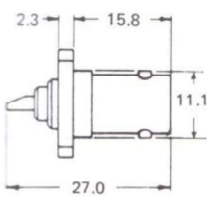
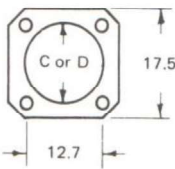
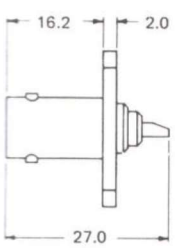
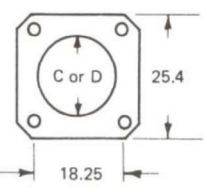
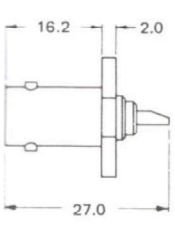
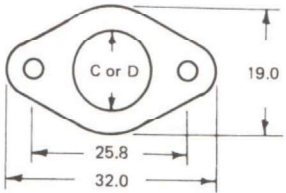
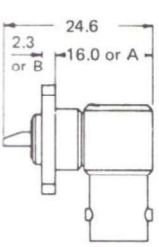
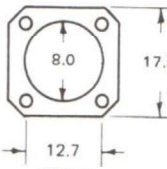
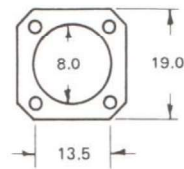
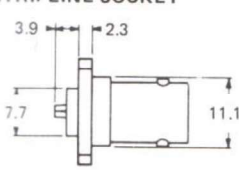
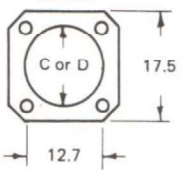
Ambient temperature range: -55°C to 150°C

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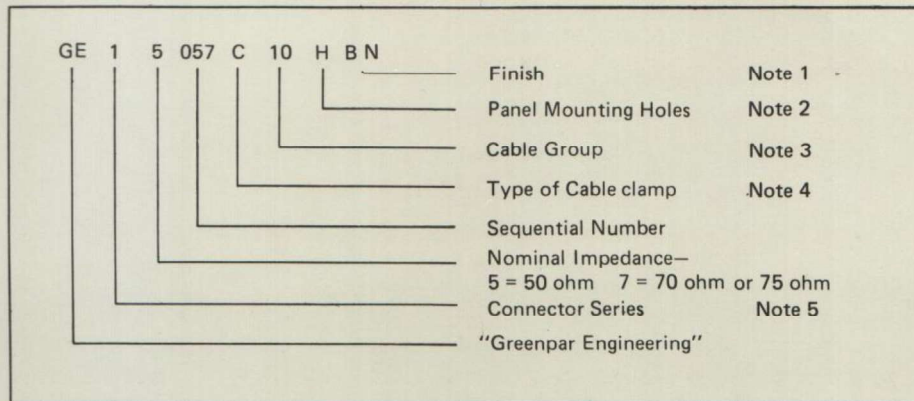
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BNC 50 ohm and 75 ohm series

PANEL SOCKETS

Connector outline	Dim. A B	Greenpar Eng. No. 50ohm 75ohm		
PANEL SOCKETS			MOUNTING DETAILS	MOUNTING HOLES
		35006 37506	 Dimension C: rear mounting – 11.2 Dimension D: front mounting – 8.0	3 - 56 UNF – E 4 - 40 UNC – F 6BA – G 3.0 mm. dia – H 2.8 mm dia. – K
		35007 37507	 Dimension C: rear mounting – 11.2 Dimension D: front mounting – 8.0	3 - 56 UNF – E 4 - 40 UNC – F 6BA – G 3.0 mm. dia – H 2.8 mm dia. – K
		35083 37583	 Dimension C: rear mounting – 11.2 Dimension D: front mounting – 8.0	3.2 mm. dia. – H 6 - 32 UNC – J 4.75 mm. dia. – L
		35085 37585	 Dimension C: rear mounting – 11.2 Dimension D: front mounting – 8.0	3.2 mm. dia. – H 6 - 32 UNC – J 4.75 mm. dia. – L
		35014 37514		3 - 56 UNF – E 4 - 40 UNC – F 6BA – G 3.0 mm. dia – H 2.8 mm dia. – K
	17.0 1.25	35015		3 - 56 UNF – E 4 - 40 UNC – F 6BA – G 3.0 mm. dia – H 2.8 mm dia. – K
STRIPLINE SOCKET				
		35065	 Dimension C: rear mounting – 11.2 Dimension D: front mounting – 8.0 Socket contact on rear face to accept pin 1.35 mm dia.	3 - 56 UNF – E 4 - 40 UNC – F 6BA – G 3.0 mm. dia – H 2.8 mm dia. – K
ORDERING INFORMATION To order, please specify GREENPAR ENGINEERING No. and MOUNTING HOLE details. e.g. GE 35083J				

The Greenpar part numbering system



Notes:

1. Alternative finishes are indicated by letter code. eg. BN indicates bright nickel finish.
2. Size of fixing holes, drilled or tapped, for panel mounted items. Details are given against individual part numbers in the catalogue.
3. One- to three-digit number indicating the group of cables which the connector will accept. Reference numbers for common cables are listed overleaf.
4. Letters A, C, D or W, or a hyphen, indicate the type of cable clamp, as follows:
 - A Typical part number GE35070A10. These connectors utilise the improved MIL style braid clamp with V-groove sealing gasket. They feature a centre contact which is captive between two insulators, and are illustrated in BNC assembly instructions, Fig. 1.
 - C This is the preferred type of cable clamp, and offers the advantages of simplified assembly and captive centre contact. A flanged ferrule is inserted under the braid and outer sheath of the cable, and a rubber sleeve is compressed both to retain the ferrule in the connector body and to grip the cable. The result is a clamp combining good cable retention and electrical performance, with ease of assembly. The cable entry is also effectively waterproofed. This type is illustrated in BNC assembly instructions, Fig. 2.
 - D The D suffix indicates connectors for crimp assembly. These may use crimp connection either for both the centre conductor and the screen (BNC assembly instructions Fig. 4 or 5) or, centre conductor only, utilising a C-type screen connection (Fig. 3).
 - W This is a modification of the C-type clamp for use with large cables having metal reinforced sheaths, or copper tape as part of the screen conductor.
- Typical part number GE35001-10. These connectors are generally equivalents of the U.S. MIL-spec. items such as UG88/U, having MIL style braid clamps for the screen connection and non-captive centre contacts. They may utilise plain or V-groove sealing gaskets: illustrations of the two types are given in the BNC assembly instructions, Fig. 15 and 16
5. Connector series.
 1. Series N.
 2. Series C and SC.
 3. Series BNC, TNC.
 4. Series UHF.
 5. Between-series adaptors, and Greenpar ISA system.
 6. Miniature connectors SMB, SMC, SMS, S.
 7. Not used.
 8. Oscilloscope probes and miscellaneous components.
 9. Series GP (miniature BNC).