

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 intermateable 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 intermateable.

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

Contents

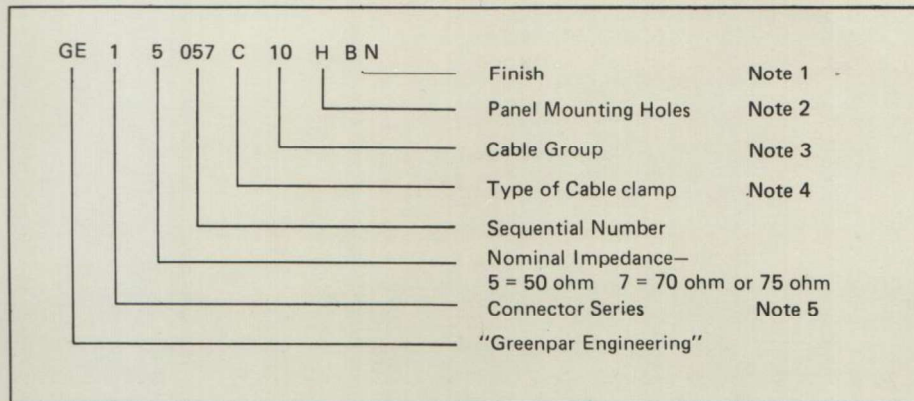
	<i>Page</i>
50-ohm and 75-ohm series BNC	
Plugs, jacks and bulkhead jacks	3, 4
Panel jacks and bulkhead sockets	5, 6
Panel sockets and panel plugs	7, 4
Crimp connectors series BNC	
MIL crimp and full crimp	8, 9
Braid clamp centre crimp	11
Post Office crimp (pattern 31)	10
BNC miscellaneous	
Post Office sealing ends	13
Connectors for large cables	13
Adaptors	12
Terminations and protective caps	15
Push-on connectors	14
BNC high voltage series	16
Assembly instructions	17

BNC 50 ohm and 75 ohm series

BULKHEAD SOCKETS

Connector outline	Dim			Greenpar Eng. No.		PANEL PIERCING	
	A	B	C	50-ohm	75-ohm		
	5.3			35026	37526	PANEL PIERCING Fig. 2 Fig. 2 Fig. 3 Fig. 5 Fig. 4 Fig. 1 Fig. 2 Fig. 8 Fig. 2 Fig. 6 or 7 ³ Fig. 2 Fig. 8 Fig. 6 Fig. 4 Fig. 7 Fig. 8 Fig. 9	
	15.8	3.2		35008 ¹	37508 ¹		
	11.4			35013	37513		
	14.3	7.4	13.7	35041 ¹			
	12.7	9.2	12.0	35043 ⁶			
	14.3	6.1	15.1	35062 ⁷	37562 ⁷		
	12.7	9.2	12.0				
	14.3	8.2	12.3				
				35049 ²	37549 ²		
				35009	37509		
ORDERING INFORMATION To order, please specify GREENPAR ENGINEERING No. and, if solder tag required, suffix S. e.g. GE 37509S				Notes. 1. Panel sealed items. 2. Item 35049 is insulated from panel. 3. Panel cut-out Fig. 7 is used when tab washer is to be omitted. 4. Nylon insulating bushes are available for items using panel cut-out Fig. 2. Order No. ST100539 — panel cut out Fig. 8. 5. All items can be supplied with a solder tag (see ordering information).		6. Flats on these connectors are at 90° to the bayonet pips. 7. Panel insulated types, using nylon insulating bushes. 8. Nylon insulating bushes are available for items using panel cut-out Fig. 1. Order No. ST103842 (panel cut-out Fig. 9.)	

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).