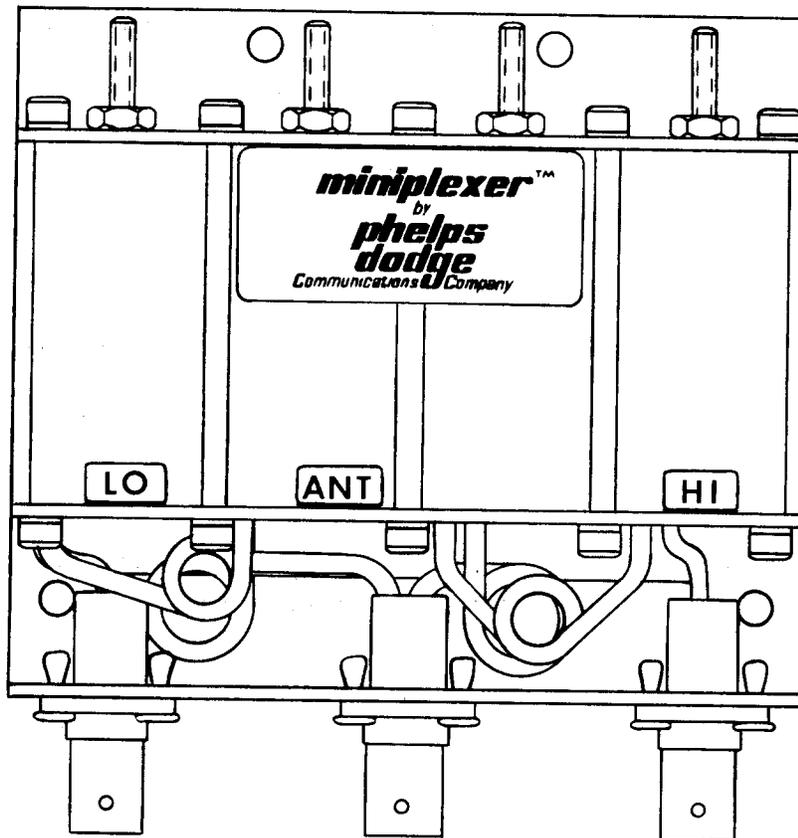


## MINIPLEXER™

4 CAVITY UHF DUPLEXER PD-7540/PD-7640  
6 CAVITY UHF DUPLEXER PD-7560/PD-7660

The MINIPLEXER™ is a compact duplexer which achieves a new standard of miniaturization. With its small size, it solves the pressing problem of space in a wide variety of applications including car telephones, portable and vehicular repeaters and repeater base stations. Design and construction features include solid shield copper jacketed intercabling for low loss, extruded aluminum cavities for durability and BNC connectors furnished as standard.

The UHF MINIPLEXER™ series is available in four or six cavity versions in two bands. The PD-7540 and PD-7560 are used for 406-440 MHz and the PD-7640 and PD-7660 are used for 430-470 MHz. Available for either 5 or 10 MHz Tx-Rx spacing, the PD-7540 and PD-7640 offer 50 dB minimum isolation between transmit and receive frequencies and the PD-7660 and PD-7560 offer 65 dB minimum isolation. All units are easily field-tunable.



PD-7540/PD-7640 4 Cavity MINIPLEXER™ (shown full size)

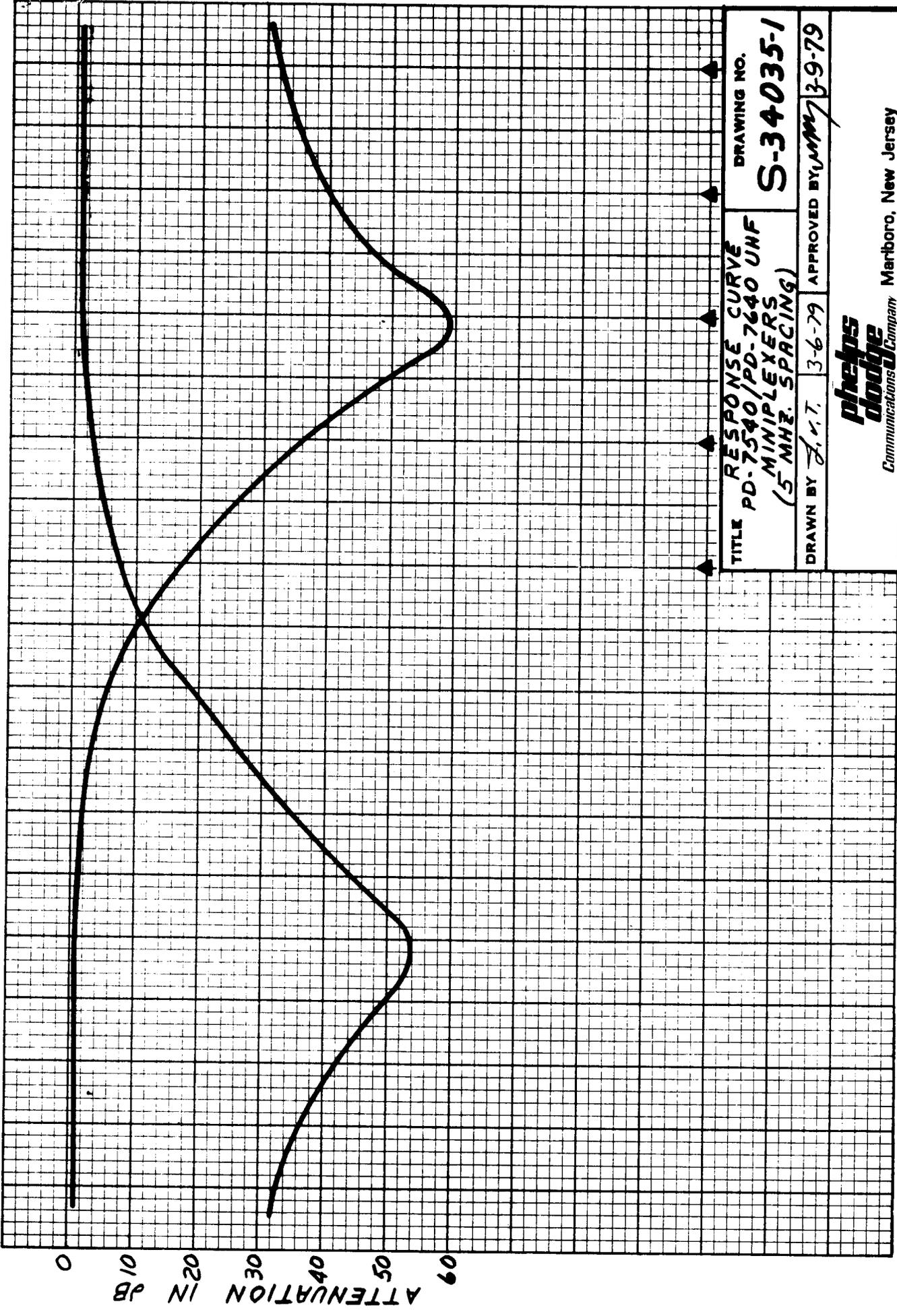
SPECIFICATIONS

|  | PD-7540/PD-7640       |     | PD-7560/PD-7660 |
|--|-----------------------|-----|-----------------|
| Frequency Range-MHz                      | 406-440/430-470       |     | 406-440/430-470 |
| Tx-Rx Spacing-MHz                        | 5                     | 10  | 5 10            |
| Maximum Input Power<br>-watts            | 50                    | 50  | 50 50           |
| Insertion Loss: Rx<br>to Antenna-dB      | 1.5                   | 1.0 | 1.5 1.2         |
| Insertion Loss: Tx<br>to Antenna-dB      | 1.5                   | 1.0 | 1.5 1.2         |
| Tx Noise Rejection<br>at Rx Frequency-dB | 50                    | 60  | 65 80           |
| Rx Isolation at Tx<br>Frequency-dB       | 50                    | 60  | 65 80           |
| Maximum VSWR (50 ohms)                   | 1.5:1                 |     | 1.5:1           |
| Operational Temperature<br>Range-°F(°C)  | -40(-40) to +140(+60) |     |                 |
| Connector Type                           | BNC Female            |     |                 |
| Maximum Dimensions<br>-in. (mm)          |                       |     |                 |
| Height                                   | 1-1/4(32)             |     | 1-1/4(32)       |
| Width                                    | 4-1/8(105)            |     | 6-1/8(156)      |
| Length                                   | 4-3/8(111)            |     | 4-3/8(111)      |
| Weight-lbs. (kg)                         | 1.0(0.45)             |     | 1.5(0.68)       |

The MINIPLEXER <sup>TM</sup> may be made in other electro-mechanical configurations for certain specialized applications. Please consult the factory for further information.



Route 79, Marlboro, NJ 07746 • (201) 462-1880 • TWX (710) 722-3861  
1420 Monterey Pass Road, Monterey Park, CA 91754 • (213) 268-9330 • TWX (910) 321-3983  
Route 44, Leesburg, FL 32748 • (904) 787-9200 • TWX (810) 871-0873



TITLE RESPONSE CURVE  
 PD-7540/PD-7640 UNF  
 (5 MHZ. SPACING)

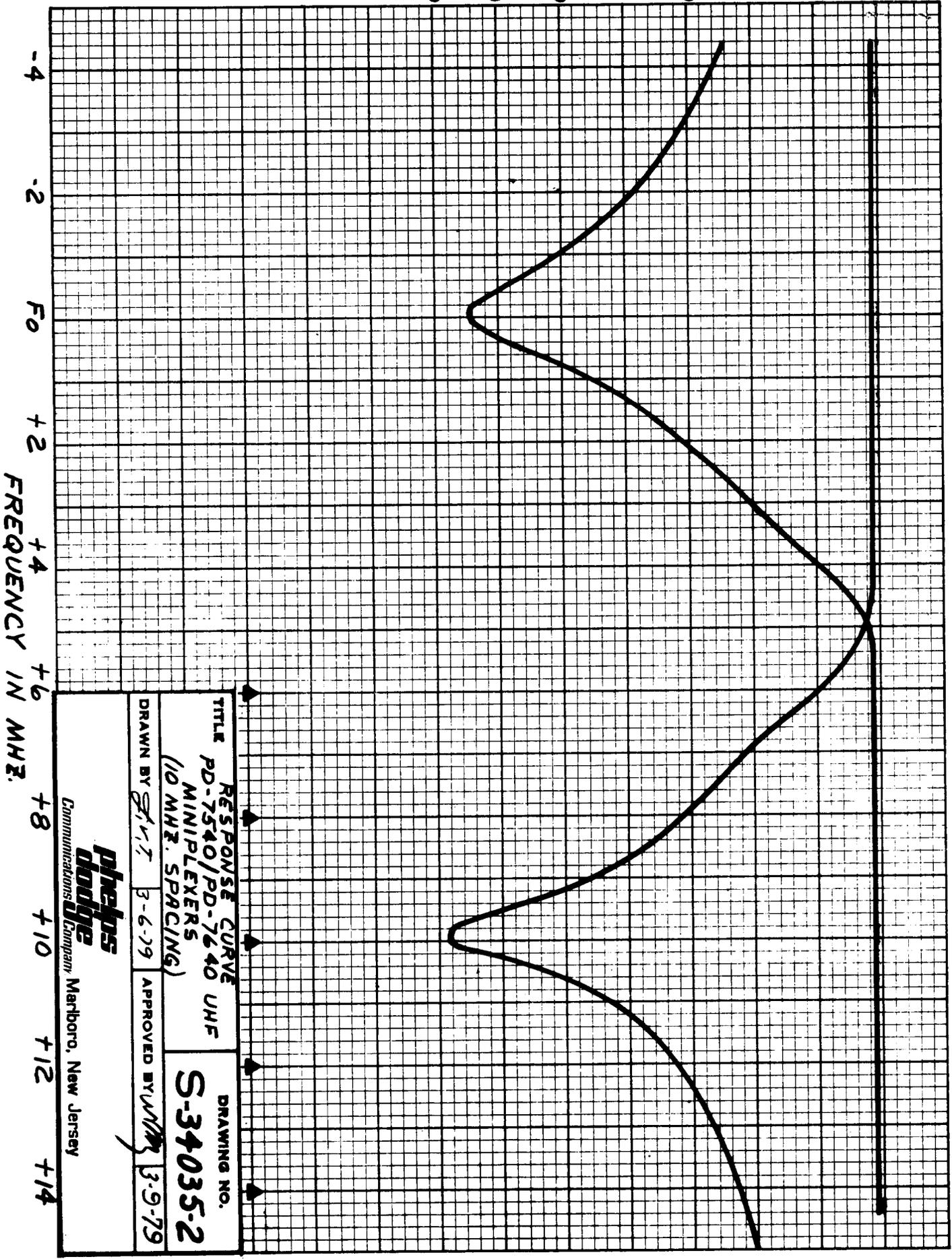
DRAWING NO.  
**S-34035-1**

DRAWN BY *J.V.T.* 3-6-79 APPROVED BY *J.M.M.* 3-9-79

**phelps**  
**dodge**  
 Communications Company  
 Marlboro, New Jersey

-2 -1 F0 +1 +2 +3 +4 +5 +6 +7

FREQUENCY IN MHZ.

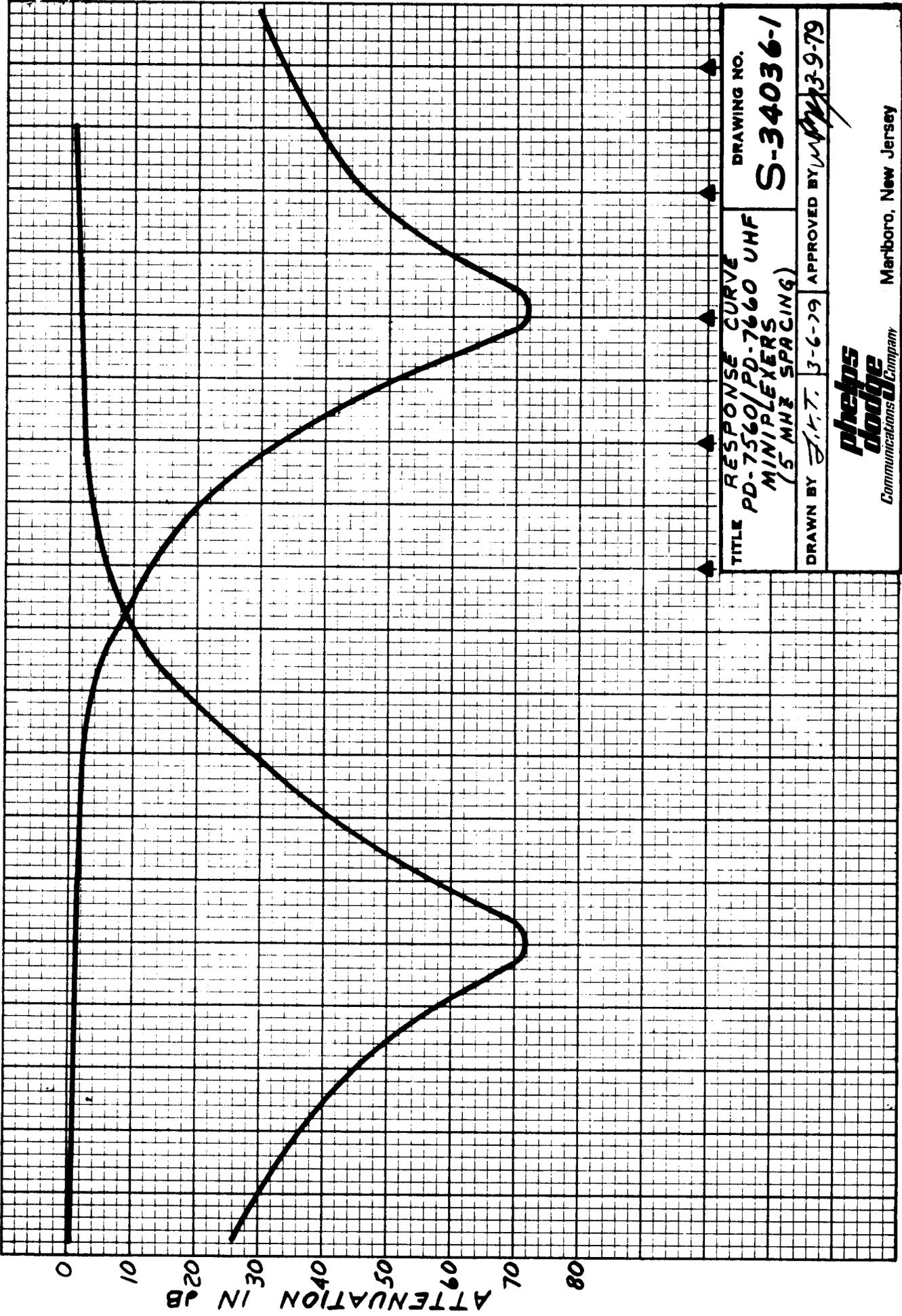


TITLE RESPONSE CURVE  
 PD-7540/PD-7640 UHF  
 MINIPLEXERS  
 (10 MHZ. SPACING)

DRAWING NO. S-34035-2

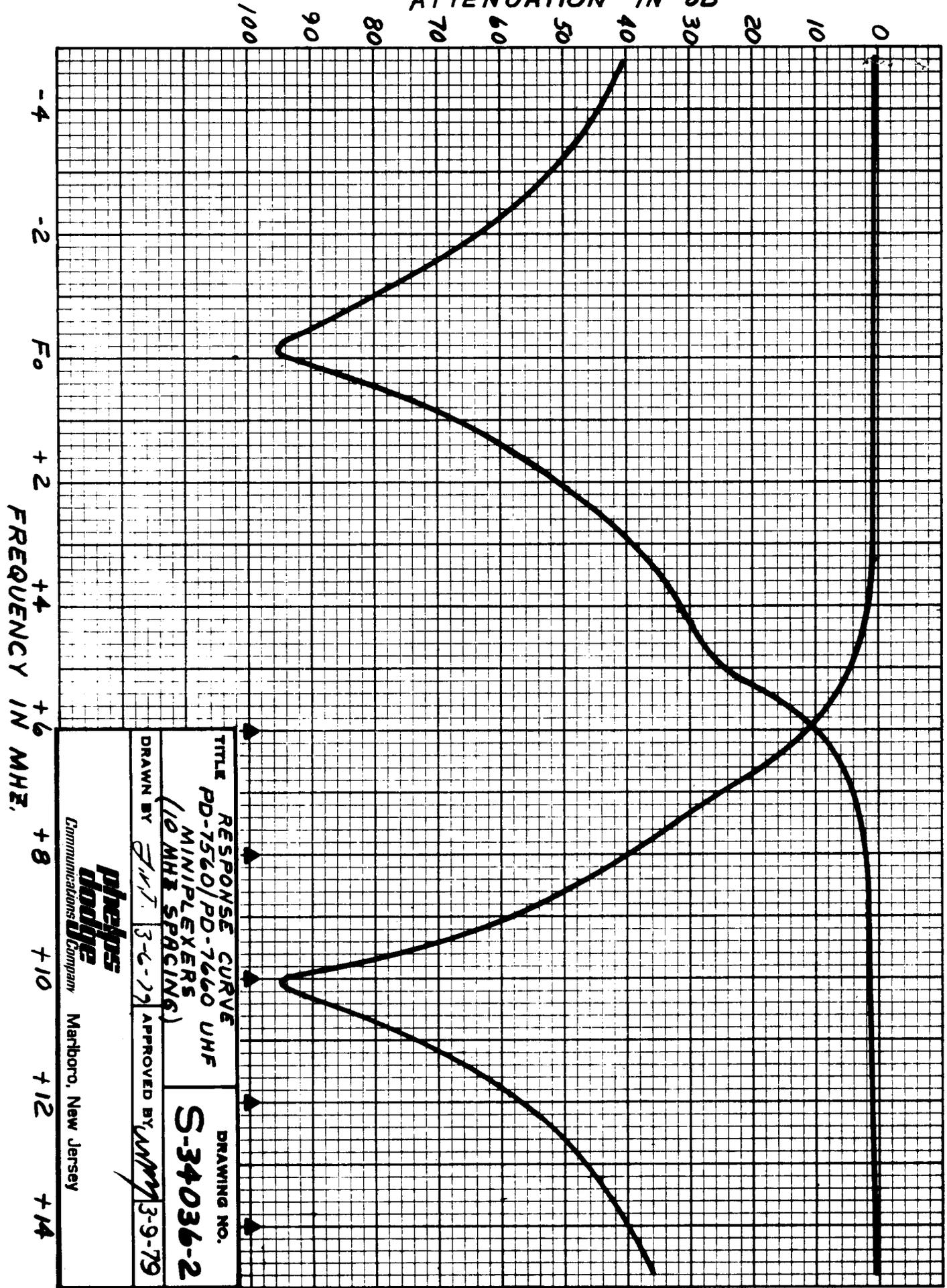
DRAWN BY *g/n/t* 3-6-79 APPROVED BY *W/M* 3-9-79

**phelps**  
**dodge**  
 Communications Company, Marlboro, New Jersey



|   |        |                                       |
|---|--------|---------------------------------------|
| TITLE RESPONSE CURVE<br>PD-7560/PD-7660 UHF<br>MINIPLEXERS<br>(5 MHZ SPACING) |        | DRAWING NO.<br><b>S-34036-1</b>       |
| DRAWN BY J.H.T.   | 3-6-79 | APPROVED BY <i>[Signature]</i> 3-9-79 |
| phelps<br>blade<br>Communications Company                                     |        | Marlboro, New Jersey                  |

-2 -1 F<sub>0</sub> +1 +2 +3 +4 +5 +6 +7



TITLE RESPONSE CURVE  
 PD-7560/PD-7660 UHF  
 MINIFLEXERS  
 (10 MHZ SPACING)

DRAWING NO. S-34036-2

DRAWN BY J.M.V. 3-6-79 APPROVED BY J.M.V. 3-9-79

**phelps**  
**hodge**  
 Communications Company  
 Marlboro, New Jersey

END OF DOCUMENT