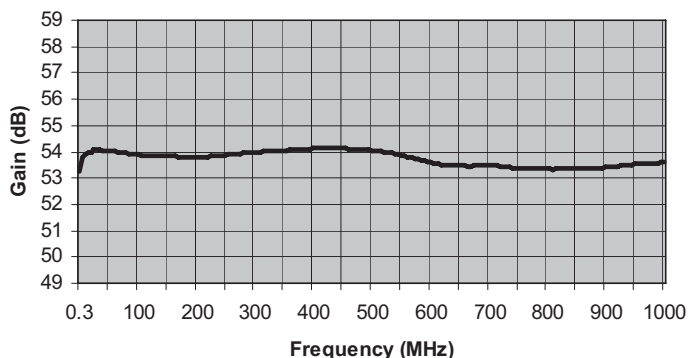


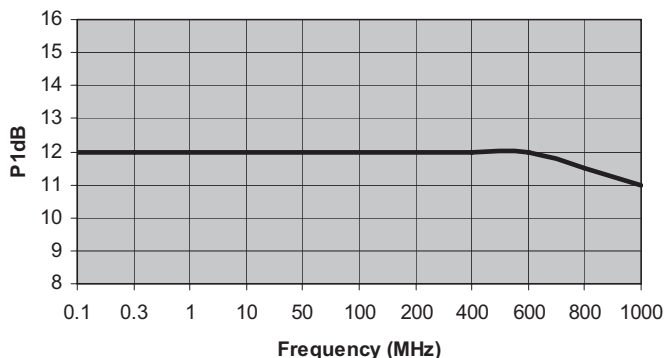
# MITEQ AM-4A-000110 AMPLIFIER

| FREQUENCY (MHz) | MODEL NUMBER | GAIN (dB) (Min.) | VAR. ( $\pm$ dB) (Max.) | VSWR (Max.) | IMPED. IN/OUT (Ohms) | NOISE FIGURE (dB, Typ.) | P1 dB (dBm) (Typ.) | VOLTS | NOM. DC POWER (mA) | OUTLINE NO. |
|-----------------|--------------|------------------|-------------------------|-------------|----------------------|-------------------------|--------------------|-------|--------------------|-------------|
| 1-1000          | AM-4A-000110 | 50               | 1                       | 2.0:1       | 50/50                | 1.6                     | 10                 | 15    | 95                 | 4           |

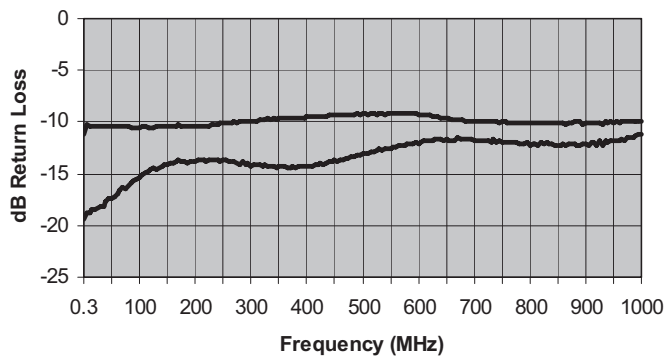
Gain (dB)



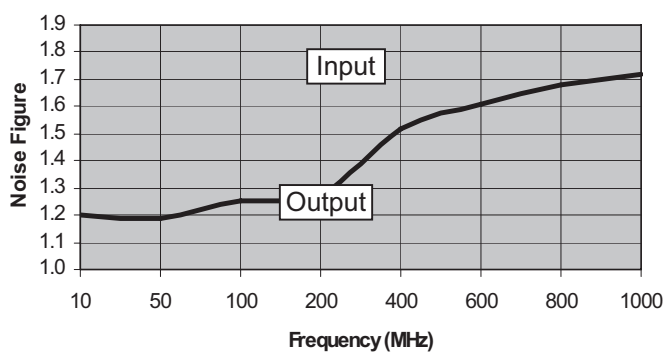
Output -1dB Gain Compression (+dBm)



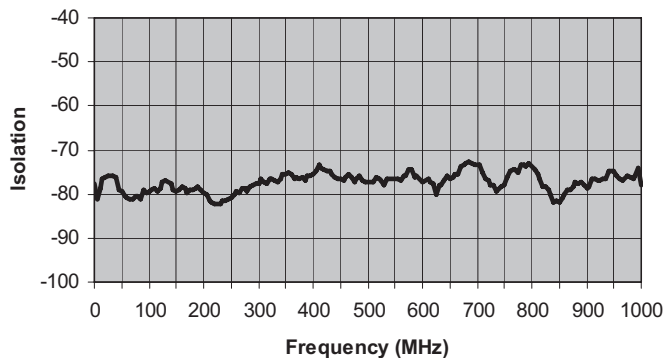
Input & Output Return Loss (dBRL)



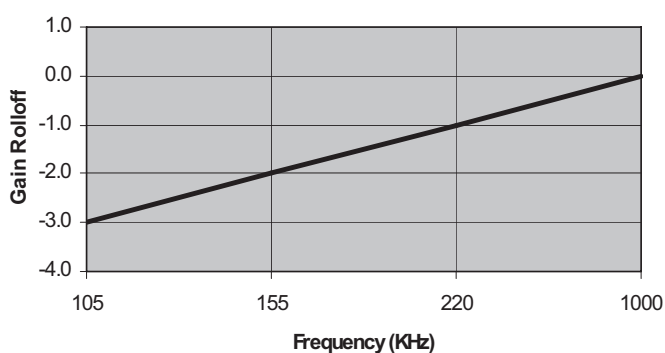
Noise Figure (dB)



Reverse Isolation (dB)



Low Frequency Gain Rolloff (dB)



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# MITEQ AM-4A-000110 AMPLIFIER

| Freq (MHz) | Gain (dB) |
|------------|-----------|
| 0.3        | 53.3      |
| 5          | 53.8      |
| 10         | 53.9      |
| 15         | 54.0      |
| 20         | 54.0      |
| 25         | 54.1      |
| 30         | 54.1      |
| 35         | 54.1      |
| 40         | 54.1      |
| 45         | 54.0      |
| 50         | 54.0      |
| 55         | 54.0      |
| 60         | 54.0      |
| 65         | 54.0      |
| 70         | 54.0      |
| 75         | 54.0      |
| 80         | 53.9      |
| 85         | 53.9      |
| 90         | 53.9      |
| 95         | 53.9      |
| 100        | 53.9      |
| 105        | 53.9      |
| 110        | 53.9      |
| 115        | 53.9      |
| 120        | 53.9      |
| 125        | 53.9      |
| 130        | 53.8      |
| 135        | 53.8      |
| 140        | 53.8      |
| 145        | 53.9      |
| 150        | 53.8      |
| 155        | 53.8      |
| 160        | 53.8      |
| 165        | 53.8      |
| 170        | 53.8      |
| 175        | 53.8      |
| 180        | 53.8      |
| 185        | 53.8      |
| 190        | 53.8      |
| 195        | 53.8      |
| 200        | 53.8      |
| 205        | 53.8      |
| 210        | 53.8      |
| 215        | 53.8      |
| 220        | 53.8      |
| 225        | 53.8      |
| 230        | 53.8      |
| 235        | 53.8      |
| 240        | 53.9      |
| 245        | 53.9      |
| 250        | 53.9      |
| 255        | 53.9      |
| 260        | 53.9      |
| 265        | 53.9      |
| 270        | 53.9      |
| 275        | 53.9      |
| 280        | 53.9      |

| Freq (MHz) | Gain (dB) |
|------------|-----------|
| 285        | 53.9      |
| 290        | 54.0      |
| 295        | 54.0      |
| 300        | 54.0      |
| 305        | 54.0      |
| 310        | 54.0      |
| 315        | 54.0      |
| 320        | 54.0      |
| 325        | 54.0      |
| 330        | 54.0      |
| 335        | 54.0      |
| 340        | 54.0      |
| 345        | 54.0      |
| 350        | 54.1      |
| 355        | 54.1      |
| 360        | 54.1      |
| 365        | 54.1      |
| 370        | 54.1      |
| 375        | 54.1      |
| 380        | 54.1      |
| 385        | 54.1      |
| 390        | 54.1      |
| 395        | 54.1      |
| 400        | 54.1      |
| 405        | 54.1      |
| 410        | 54.1      |
| 415        | 54.2      |
| 420        | 54.1      |
| 425        | 54.1      |
| 430        | 54.2      |
| 435        | 54.2      |
| 440        | 54.1      |
| 445        | 54.1      |
| 450        | 54.1      |
| 455        | 54.1      |
| 460        | 54.1      |
| 465        | 54.1      |
| 470        | 54.1      |
| 475        | 54.1      |
| 480        | 54.1      |
| 485        | 54.1      |
| 490        | 54.1      |
| 495        | 54.1      |
| 500        | 54.1      |
| 505        | 54.1      |
| 510        | 54.0      |
| 515        | 54.0      |
| 520        | 54.0      |
| 525        | 54.0      |
| 530        | 54.0      |
| 535        | 53.9      |
| 540        | 53.9      |
| 545        | 53.9      |
| 550        | 53.9      |
| 555        | 53.8      |
| 560        | 53.8      |
| 565        | 53.8      |

| Freq (MHz) | Gain (dB) |
|------------|-----------|
| 570        | 53.8      |
| 575        | 53.7      |
| 580        | 53.7      |
| 585        | 53.7      |
| 590        | 53.7      |
| 595        | 53.6      |
| 600        | 53.6      |
| 605        | 53.6      |
| 610        | 53.5      |
| 615        | 53.5      |
| 620        | 53.5      |
| 625        | 53.5      |
| 630        | 53.5      |
| 635        | 53.5      |
| 640        | 53.5      |
| 645        | 53.5      |
| 650        | 53.5      |
| 655        | 53.5      |
| 660        | 53.5      |
| 665        | 53.5      |
| 670        | 53.5      |
| 675        | 53.5      |
| 680        | 53.5      |
| 685        | 53.5      |
| 690        | 53.5      |
| 695        | 53.5      |
| 700        | 53.5      |
| 705        | 53.5      |
| 710        | 53.5      |
| 715        | 53.5      |
| 720        | 53.5      |
| 725        | 53.4      |
| 730        | 53.4      |
| 735        | 53.4      |
| 740        | 53.4      |
| 745        | 53.4      |
| 750        | 53.4      |
| 755        | 53.4      |
| 760        | 53.4      |
| 765        | 53.4      |
| 770        | 53.4      |
| 775        | 53.4      |
| 780        | 53.4      |
| 785        | 53.4      |
| 790        | 53.4      |
| 795        | 53.4      |
| 800        | 53.4      |
| 805        | 53.4      |
| 810        | 53.3      |
| 815        | 53.3      |
| 820        | 53.4      |
| 825        | 53.4      |
| 830        | 53.4      |
| 835        | 53.4      |
| 840        | 53.3      |
| 845        | 53.3      |
| 850        | 53.4      |

| Freq (MHz) | Gain (dB) |
|------------|-----------|
| 855        | 53.4      |
| 860        | 53.3      |
| 865        | 53.4      |
| 870        | 53.4      |
| 875        | 53.4      |
| 880        | 53.4      |
| 885        | 53.4      |
| 890        | 53.4      |
| 895        | 53.4      |
| 900        | 53.4      |
| 905        | 53.4      |
| 910        | 53.4      |
| 915        | 53.4      |
| 920        | 53.5      |
| 925        | 53.5      |
| 930        | 53.5      |
| 935        | 53.5      |
| 940        | 53.5      |
| 945        | 53.5      |
| 950        | 53.5      |
| 955        | 53.5      |
| 960        | 53.5      |
| 965        | 53.5      |
| 970        | 53.5      |
| 975        | 53.5      |
| 980        | 53.6      |
| 985        | 53.6      |
| 990        | 53.6      |
| 995        | 53.6      |
| 1000       | 53.6      |



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# MITEQ AM-4A-000110 AMPLIFIER

| Freq (MHz) | Input VSWR (dBRL) | Output VSWR (dBRL) |
|------------|-------------------|--------------------|
| 0.3        | -19               | -11                |
| 5          | -19               | -10                |
| 10         | -19               | -10                |
| 15         | -18               | -10                |
| 20         | -18               | -10                |
| 25         | -18               | -10                |
| 30         | -18               | -10                |
| 35         | -18               | -10                |
| 40         | -18               | -10                |
| 45         | -17               | -10                |
| 50         | -17               | -10                |
| 55         | -17               | -10                |
| 60         | -17               | -10                |
| 65         | -17               | -10                |
| 70         | -16               | -10                |
| 75         | -16               | -10                |
| 80         | -16               | -10                |
| 85         | -16               | -11                |
| 90         | -16               | -11                |
| 95         | -16               | -11                |
| 100        | -15               | -11                |
| 105        | -15               | -10                |
| 110        | -15               | -10                |
| 115        | -15               | -10                |
| 120        | -15               | -11                |
| 125        | -14               | -11                |
| 130        | -15               | -10                |
| 135        | -14               | -10                |
| 140        | -14               | -10                |
| 145        | -14               | -10                |
| 150        | -14               | -10                |
| 155        | -14               | -10                |
| 160        | -14               | -10                |
| 165        | -14               | -10                |
| 170        | -14               | -10                |
| 175        | -14               | -10                |
| 180        | -14               | -10                |
| 185        | -14               | -10                |
| 190        | -14               | -10                |
| 195        | -14               | -10                |
| 200        | -14               | -10                |
| 205        | -14               | -10                |
| 210        | -14               | -10                |
| 215        | -14               | -10                |
| 220        | -14               | -10                |
| 225        | -14               | -10                |
| 230        | -14               | -10                |
| 235        | -14               | -10                |
| 240        | -14               | -10                |
| 245        | -14               | -10                |
| 250        | -14               | -10                |
| 255        | -14               | -10                |
| 260        | -14               | -10                |
| 265        | -14               | -10                |
| 270        | -14               | -10                |
| 275        | -14               | -10                |
| 280        | -14               | -10                |
| 285        | -14               | -10                |
| 290        | -14               | -10                |
| 295        | -14               | -10                |
| 300        | -14               | -10                |
| 305        | -14               | -10                |
| 310        | -14               | -10                |

| Freq (MHz) | Input VSWR (dBRL) | Output VSWR (dBRL) |
|------------|-------------------|--------------------|
| 315        | -14               | -10                |
| 320        | -14               | -10                |
| 325        | -14               | -10                |
| 330        | -14               | -10                |
| 335        | -14               | -10                |
| 340        | -14               | -10                |
| 345        | -14               | -10                |
| 350        | -14               | -10                |
| 355        | -14               | -10                |
| 360        | -14               | -10                |
| 365        | -14               | -10                |
| 370        | -14               | -10                |
| 375        | -14               | -10                |
| 380        | -14               | -10                |
| 385        | -14               | -10                |
| 390        | -14               | -10                |
| 395        | -14               | -10                |
| 400        | -14               | -10                |
| 405        | -14               | -10                |
| 410        | -14               | -9                 |
| 415        | -14               | -9                 |
| 420        | -14               | -9                 |
| 425        | -14               | -9                 |
| 430        | -14               | -9                 |
| 435        | -14               | -9                 |
| 440        | -14               | -9                 |
| 445        | -14               | -9                 |
| 450        | -14               | -9                 |
| 455        | -14               | -9                 |
| 460        | -14               | -9                 |
| 465        | -14               | -9                 |
| 470        | -14               | -9                 |
| 475        | -14               | -9                 |
| 480        | -13               | -9                 |
| 485        | -13               | -9                 |
| 490        | -13               | -9                 |
| 495        | -13               | -9                 |
| 500        | -13               | -9                 |
| 505        | -13               | -9                 |
| 510        | -13               | -9                 |
| 515        | -13               | -9                 |
| 520        | -13               | -9                 |
| 525        | -13               | -9                 |
| 530        | -13               | -9                 |
| 535        | -13               | -9                 |
| 540        | -13               | -9                 |
| 545        | -13               | -9                 |
| 550        | -13               | -9                 |
| 555        | -12               | -9                 |
| 560        | -12               | -9                 |
| 565        | -12               | -9                 |
| 570        | -12               | -9                 |
| 575        | -12               | -9                 |
| 580        | -12               | -9                 |
| 585        | -12               | -9                 |
| 590        | -12               | -9                 |
| 595        | -12               | -9                 |
| 600        | -12               | -9                 |
| 605        | -12               | -9                 |
| 610        | -12               | -9                 |
| 615        | -12               | -9                 |
| 620        | -12               | -9                 |
| 625        | -12               | -9                 |

| Freq (MHz) | Input VSWR (dBRL) | Output VSWR (dBRL) |
|------------|-------------------|--------------------|
| 630        | -12               | -9                 |
| 635        | -12               | -10                |
| 640        | -12               | -10                |
| 645        | -12               | -10                |
| 650        | -12               | -10                |
| 655        | -12               | -10                |
| 660        | -12               | -10                |
| 665        | -12               | -10                |
| 670        | -11               | -10                |
| 675        | -12               | -10                |
| 680        | -12               | -10                |
| 685        | -12               | -10                |
| 690        | -12               | -10                |
| 695        | -12               | -10                |
| 700        | -12               | -10                |
| 705        | -12               | -10                |
| 710        | -12               | -10                |
| 715        | -12               | -10                |
| 720        | -12               | -10                |
| 725        | -12               | -10                |
| 730        | -12               | -10                |
| 735        | -12               | -10                |
| 740        | -12               | -10                |
| 745        | -12               | -10                |
| 750        | -12               | -10                |
| 755        | -12               | -10                |
| 760        | -12               | -10                |
| 765        | -12               | -10                |
| 770        | -12               | -10                |
| 775        | -12               | -10                |
| 780        | -12               | -10                |
| 785        | -12               | -10                |
| 790        | -12               | -10                |
| 795        | -12               | -10                |
| 800        | -12               | -10                |
| 805        | -12               | -10                |
| 810        | -12               | -10                |
| 815        | -12               | -10                |
| 820        | -12               | -10                |
| 825        | -12               | -10                |
| 830        | -12               | -10                |
| 835        | -12               | -10                |
| 840        | -12               | -10                |
| 845        | -12               | -10                |
| 850        | -12               | -10                |
| 855        | -12               | -10                |
| 860        | -12               | -10                |
| 865        | -12               | -10                |
| 870        | -12               | -10                |
| 875        | -12               | -10                |
| 880        | -12               | -10                |
| 885        | -12               | -10                |
| 890        | -12               | -10                |
| 895        | -12               | -10                |
| 900        | -12               | -10                |
| 905        | -12               | -10                |
| 910        | -12               | -10                |
| 915        | -12               | -10                |
| 920        | -12               | -10                |
| 925        | -12               | -10                |
| 930        | -12               | -10                |
| 935        | -12               | -10                |
| 940        | -12               | -10                |

| Freq (MHz) | Input VSWR (dBRL) | Output VSWR (dBRL) |
|------------|-------------------|--------------------|
| 945        | -12               | -10                |
| 950        | -12               | -10                |
| 955        | -12               | -10                |
| 960        | -12               | -10                |
| 965        | -12               | -10                |
| 970        | -12               | -10                |
| 975        | -12               | -10                |
| 980        | -11               | -10                |
| 985        | -11               | -10                |
| 990        | -11               | -10                |
| 995        | -11               | -10                |
| 1000       | -11               | -10                |



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# MITEQ AM-4A-000110 AMPLIFIER

| Freq (MHz) | Reverse Isolation (dB) |
|------------|------------------------|
| 0.3        | -78                    |
| 5          | -81                    |
| 10         | -79                    |
| 15         | -76                    |
| 20         | -76                    |
| 25         | -76                    |
| 30         | -76                    |
| 35         | -76                    |
| 40         | -76                    |
| 45         | -79                    |
| 50         | -79                    |
| 55         | -80                    |
| 60         | -81                    |
| 65         | -81                    |
| 70         | -81                    |
| 75         | -81                    |
| 80         | -80                    |
| 85         | -81                    |
| 90         | -79                    |
| 95         | -80                    |
| 100        | -79                    |
| 105        | -79                    |
| 110        | -79                    |
| 115        | -79                    |
| 120        | -79                    |
| 125        | -77                    |
| 130        | -77                    |
| 135        | -77                    |
| 140        | -78                    |
| 145        | -79                    |
| 150        | -79                    |
| 155        | -79                    |
| 160        | -78                    |
| 165        | -79                    |
| 170        | -80                    |
| 175        | -79                    |
| 180        | -79                    |
| 185        | -79                    |
| 190        | -78                    |
| 195        | -79                    |
| 200        | -80                    |
| 205        | -80                    |
| 210        | -82                    |
| 215        | -82                    |
| 220        | -82                    |
| 225        | -82                    |
| 230        | -82                    |
| 235        | -81                    |
| 240        | -81                    |
| 245        | -81                    |
| 250        | -81                    |
| 255        | -80                    |
| 260        | -79                    |
| 265        | -80                    |
| 270        | -79                    |
| 275        | -79                    |

| Freq (MHz) | Reverse Isolation (dB) |
|------------|------------------------|
| 280        | -79                    |
| 285        | -78                    |
| 290        | -78                    |
| 295        | -78                    |
| 300        | -78                    |
| 305        | -77                    |
| 310        | -77                    |
| 315        | -78                    |
| 320        | -77                    |
| 325        | -77                    |
| 330        | -77                    |
| 335        | -77                    |
| 340        | -77                    |
| 345        | -76                    |
| 350        | -76                    |
| 355        | -75                    |
| 360        | -76                    |
| 365        | -77                    |
| 370        | -76                    |
| 375        | -77                    |
| 380        | -76                    |
| 385        | -77                    |
| 390        | -76                    |
| 395        | -76                    |
| 400        | -75                    |
| 405        | -75                    |
| 410        | -73                    |
| 415        | -74                    |
| 420        | -75                    |
| 425        | -75                    |
| 430        | -75                    |
| 435        | -75                    |
| 440        | -76                    |
| 445        | -77                    |
| 450        | -77                    |
| 455        | -77                    |
| 460        | -76                    |
| 465        | -76                    |
| 470        | -76                    |
| 475        | -77                    |
| 480        | -77                    |
| 485        | -76                    |
| 490        | -77                    |
| 495        | -77                    |
| 500        | -77                    |
| 505        | -77                    |
| 510        | -77                    |
| 515        | -76                    |
| 520        | -76                    |
| 525        | -77                    |
| 530        | -78                    |
| 535        | -77                    |
| 540        | -77                    |
| 545        | -76                    |
| 550        | -77                    |
| 555        | -76                    |

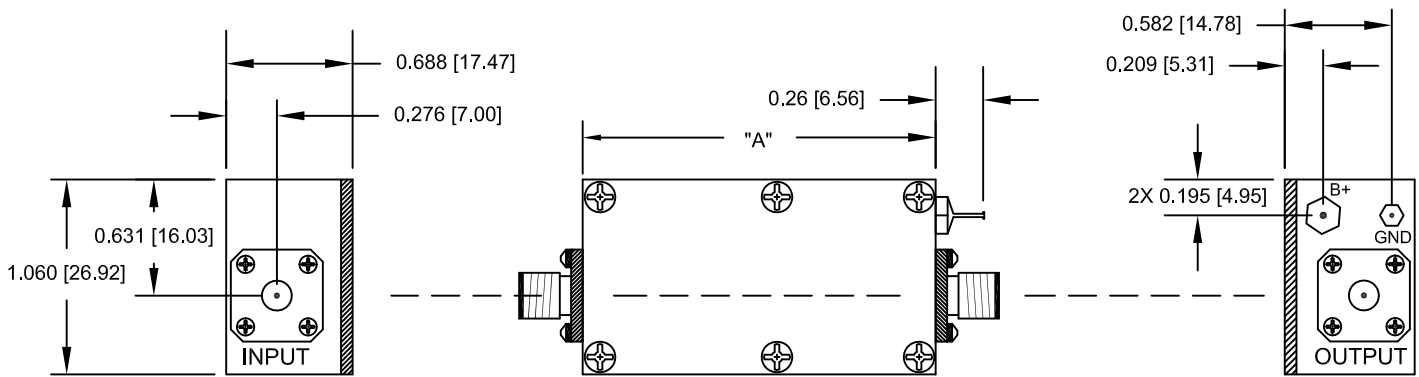
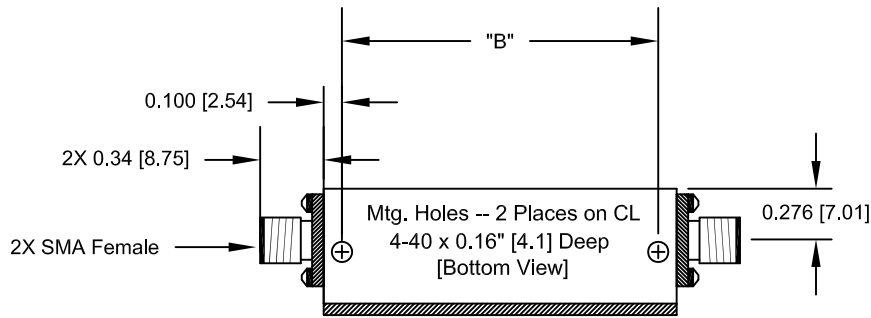
| Freq (MHz) | Reverse Isolation (dB) |
|------------|------------------------|
| 560        | -77                    |
| 565        | -76                    |
| 570        | -76                    |
| 575        | -75                    |
| 580        | -74                    |
| 585        | -76                    |
| 590        | -76                    |
| 595        | -76                    |
| 600        | -77                    |
| 605        | -77                    |
| 610        | -77                    |
| 615        | -77                    |
| 620        | -78                    |
| 625        | -80                    |
| 630        | -78                    |
| 635        | -78                    |
| 640        | -77                    |
| 645        | -76                    |
| 650        | -77                    |
| 655        | -76                    |
| 660        | -76                    |
| 665        | -76                    |
| 670        | -74                    |
| 675        | -73                    |
| 680        | -73                    |
| 685        | -73                    |
| 690        | -73                    |
| 695        | -73                    |
| 700        | -73                    |
| 705        | -73                    |
| 710        | -75                    |
| 715        | -76                    |
| 720        | -77                    |
| 725        | -78                    |
| 730        | -78                    |
| 735        | -79                    |
| 740        | -79                    |
| 745        | -78                    |
| 750        | -78                    |
| 755        | -76                    |
| 760        | -75                    |
| 765        | -74                    |
| 770        | -74                    |
| 775        | -75                    |
| 780        | -73                    |
| 785        | -73                    |
| 790        | -74                    |
| 795        | -73                    |
| 800        | -74                    |
| 805        | -75                    |
| 810        | -76                    |
| 815        | -77                    |
| 820        | -78                    |
| 825        | -78                    |
| 830        | -79                    |
| 835        | -80                    |

| Freq (MHz) | Reverse Isolation (dB) |
|------------|------------------------|
| 840        | -82                    |
| 845        | -82                    |
| 850        | -82                    |
| 855        | -81                    |
| 860        | -80                    |
| 865        | -79                    |
| 870        | -79                    |
| 875        | -78                    |
| 880        | -77                    |
| 885        | -78                    |
| 890        | -77                    |
| 895        | -78                    |
| 900        | -79                    |
| 905        | -78                    |
| 910        | -77                    |
| 915        | -76                    |
| 920        | -77                    |
| 925        | -77                    |
| 930        | -76                    |
| 935        | -77                    |
| 940        | -75                    |
| 945        | -75                    |
| 950        | -75                    |
| 955        | -76                    |
| 960        | -77                    |
| 965        | -77                    |
| 970        | -77                    |
| 975        | -76                    |
| 980        | -76                    |
| 985        | -76                    |
| 990        | -76                    |
| 995        | -74                    |
| 1000       | -78                    |



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| DASH NO. | APPLICATION |         | REVISIONS |                              |            |                  |
|----------|-------------|---------|-----------|------------------------------|------------|------------------|
|          | NEXT ASSY   | USED ON | LTR       | DESCRIPTION                  | DATE       | APPROVED         |
|          |             |         | A         | INITIAL RELEASE DWO#91011898 | 11/21/2007 | <i>L. Kammer</i> |




NOTES:

1. OPTIONALLY AVAILABLE WITH BNC-FEMALE, N-FEMALE AND N-MALE CONNECTORS.

Dimensions Are Inches [mm]

| Outline | Dim "A"<br>Inch [mm] | Dim "B"<br>Inch [mm] | Weight<br>ounce [gm] |
|---------|----------------------|----------------------|----------------------|
| 1S      | 1.11 [28.2]          | 0.91 [23.1]          | 1.2 [34]             |
| 2S      | 1.92 [48.8]          | 1.72 [43.7]          | 1.8 [50]             |
| 3S      | 2.74 [69.6]          | 2.54 [64.5]          | 2.3 [66]             |
| 4S      | 3.55 [90.2]          | 3.35 [85.1]          | 3.0 [84]             |
| 5S      | 4.48 [113.8]         | 4.28 [109.0]         | 3.6 [102]            |

(OUTLINE #1-5 Slimline)

|  |                             |                    |   |                          |              |
|--|-----------------------------|--------------------|---|--------------------------|--------------|
| ALL PAGES ARE OF ORIGINAL ISSUE (A) EXCEPT AS NOTED. | CONTR NO.<br>20P010         |                    | <br>100 Davids Drive, Hauppauge, New York 11788 |                          |              |
|  | PREP BY<br><i>L. Kammer</i> | DATE<br>11/21/2007 |   |                          |              |
|  | CHKD BY<br><i>L. Kammer</i> | DATE<br>11/21/2007 | OUTLINE DRAWING<br>AMPLIFIER<br>SLIMLINE  |                          |              |
|  | PROJ ENGR<br><i>B. Pope</i> | DATE<br>11/21/2007 |   |                          |              |
|  | APPROVAL (PROJ)             |                    | SIZE<br>A   | CODE IDENT. NO.<br>33592 | 179685       |
|  | APPROVAL (GOVT)             |                    | SCALE   | REV.<br>A                | SHEET 1 OF 1 |