SWITCHED
FILTER BANKS

NEW
PRODUCT DEVELOPMENTS
AT
AMERICAN MICROWAVE CORPORATION

NOVEMBER 22, 1992
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1.0 SP6T, 0.01-8 GHz SWITCHED FILTER BANK .................. 1-2
DESCRIPTION
AMC MODEL SFB-0108-6P IS A 6 CHANNEL SWITCHED FILTER BANK WITH INTEGRAL TTL DRIVER.

SPECIFICATIONS
- FREQUENCY RANGE ................. 0.01–8 GHz
- INSERTION LOSS
  CHANNEL 1 .................. 0.01–0.5 GHz, 3.0dB MAXIMUM
  CHANNEL 2 .................. 0.45–0.9 GHz, 3.3dB MAXIMUM
  CHANNEL 3 .................. 0.8–1.5 GHz, 3.6dB MAXIMUM
  CHANNEL 4 .................. 1.4–2.7 GHz, 3.8dB MAXIMUM
  CHANNEL 5 .................. 2.2–4.3 GHz, 4.0dB MAXIMUM
  CHANNEL 6 .................. 3.8–7.5 GHz, 5.0dB MAXIMUM
- ISOLATION ..................... 60 dB MINIMUM
- VSWR (ON) ...................... 2:1 MAXIMUM
- SWITCHING TIME
  DELAY ON (50% TTL TO 90% RF) .... 500nS MAXIMUM
  DELAY OFF (50% TTL TO 10% RF) .... 500nS MAXIMUM
- CONTROL
  TTL COMPATIBLE, UNITY LOAD
  6 INDIVIDUAL CONTROLS
  LOGIC "0" INSERTION LOSS
  LOGIC "1" ISOLATION
- RF POWER RATINGS .............. +27dBm CW MAXIMUM
- POWER SUPPLY ................. +12VDC @ 100mA MAXIMUM
                               -12VDC @ 250mA MAXIMUM
- CONNECTORS
  RF INPUT/OUTPUT ............... SMA FEMALE
  POWER CONTROL ................. SOLDER PIN
  SMA FEMALE
- SIZE ................................ 4.0” x 3.5” x 1.0”

AVAILABLE OPTIONS
A13 .................. ±15 VOLT DC SUPPLY
A14 .................. J1 SMA MALE, J2 & J3 SMA FEMALE
A15 .................. J1 SMA FEMALE, J2 & J3 SMA MALE
A19 .................. SMC CONTROL TERMINALS
A20 .................. MULTIPIN OPTION
A21 .................. 3 BIT DECODER OPTION

MECHANICAL OUTLINE

LOGIC TABLE
| E1 = 0 | J1–J2 | 0.01–0.5 GHz |
| E2 = 0 | J1–J2 | 0.45–0.9 GHz |
| E3 = 0 | J1–J2 | 0.8–1.5 GHz |
| E4 = 0 | J1–J2 | 1.4–2.7 GHz |
| E5 = 0 | J1–J3 | 2.2–4.3 GHz |
| E6 = 0 | J1–J3 | 3.8–7.5 GHz |

NOTES:
1) DIMENSIONS ARE IN INCHES
2) TOLERANCES: X,XX ±0.01
   X,XXX ±0.001
3) WEIGHT: APPROX. 16

ENVIRONMENTAL RATINGS
- TEMPERATURE ........... −55°C TO +95°C (OPERATING)
                         −65°C TO +125°C (STORAGE)
- HUMIDITY ............... MIL-STD-202F, METHOD 103B COND
- SHOCK .................... MIL-STD-202F, METHOD 213B COND
- VIBRATION ............... MIL-STD-202F, METHOD 204D COND
- ALTITUDE ............... MIL-STD-202F, METHOD 105C COND
- TEMPERATURE CYCLE ...... MIL-STD-202F, METHOD 107D COND

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PRODUCT FEATURE
SFB-0108-6P
0.01–8 GHz, SWITCHED FILTER

SIZE A SHEET 1 OF 2 DWG #: 100-