

DESCRIPTION

PMI MODEL SBA-218-63DB-6B-SFF IS A SWITCHED BIT ATTENUATOR OPERATING FROM 2 TO 18 GHz. DESIGNED TO BE SWITCHED BETWEEN A LOW LOSS STATE AND 6 SET ATTENUATION STATES. THE SETTINGS ARE SELECTED BY 6 INDEPENDENT BIT CONTROLS.

SPECIFICATIONS

- FREQUENCY RANGE:..... 2 TO 18 GHz
- INSERTION LOSS:..... 7.0dB MAX (2 TO 8 GHz)
..... 8.5dB MAX (8 TO 12 GHz)
..... 9.5dB MAX (12 TO 16 GHz)
..... 10.5dB MAX (16 TO 18 GHz)
- ATTENUATION RANGE (OVER IL):..... 0 TO 63 dB
- NOMINAL ATTENUATION RES:..... 1dB
- ACTUAL ATTENUATION RES:..... 1 +/-0.2dB GOAL
- MONOTONICITY:..... GUARANTEED
- RIPLE AND SLOPE:..... 2dB TYP (0 TO 31 dB ATTENUATION)
..... 4dB TYP (31 TO 63 dB ATTENUATION)
..... 2 TO 18 GHz, OVER TEMP
..... 0.6dB TYP (0 TO 31 dB ATTENUATION)
..... 1.2dB TYP (31 TO 63 dB ATTENUATION)
..... OVER ANY 1 GHz, OVER TEMP
- HARMONICS:..... -38dBc MAX @ 18dBm INPUT
..... -40dBc MAX @ 15dBm INPUT
..... -45dBc MAX @ 12dBm INPUT
- SWITCHING SPEED:..... 80ns MAX
- SWITCHING RATE:..... 1MHz MIN
- SYMTRY:..... BI-DIRECTIONAL
- VSWR (IN/OUT):..... 2.0:1 MAX
- INPUT POWER:..... +25dBm CW MAX.
- VIDEO LEAKAGE:..... -55dBm MAX, 1 TO 18 GHz
..... MEASURED WITH SPECTRUM ANALYZER SET TO RF VIDEO BW RESOLUTION: 3MHz
- DC VOLTAGE:..... +5VDC +/-5% @ 200 mA MAX
..... -12VDC +/-5% @ 300 mA MAX
- TTL CONTROL:..... 6 BITS
..... "1=INSERTION LOSS"
..... "0 =ATTENUATION"
- CONNECTORS:..... SMA (F) REMOVABLE PER MIL-C-39012
- SIZE:..... 2.63" X 0.83" X 0.5"
- FINISH:..... BLUE EPOXY POLIMIDE
..... COATING IAW MIL-C-22750,
..... TYPE I OVER EPOXY POLIMIDE
..... PRIMER IAW MIL-P-23377,
..... TYPE I, CLASS 1 OR 3.

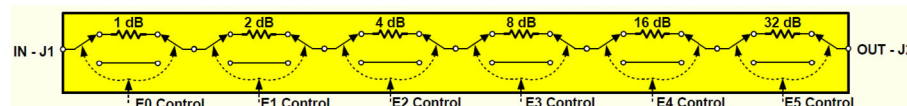
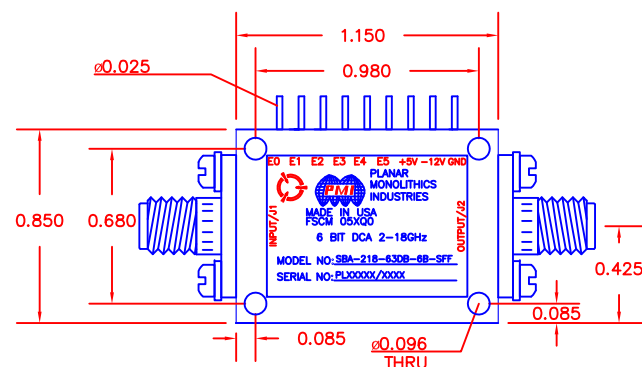
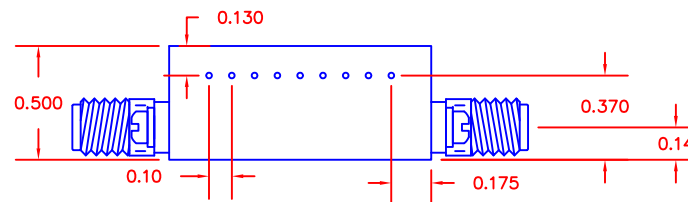
ENVIRONMENTAL RATINGS:

- TEMPERATURE:..... 0°C TO +71°C (OPERATING)
..... -20°C TO +85°C (STORAGE)
- HUMIDITY:..... MIL-STD-810D, METHOD 507.2, PRIII, AGGREGATED RH95%+/-5%
- SHOCK:..... MIL-STD-810D, METHOD 516.3 HALF SINE 20G, 11ms
- VIBRATION:..... MIL-STD-202F, METHOD 214D, TC E, FIGURE 214-1, 3 HOURS EACH AXIS
- ALTITUDE:..... 40,000FT, NON-OPERATING
- TEMPERATURE CYCLE:..... MIL-STD-202F, METHOD 107D COND. A
- SALT FOG AND SPRAY:..... MIL-STD-810D, METHOD 509.2 (5% NaCl FOR 48 HOURS)
- FUNGUS:..... MIL-STD-810D, METHOD 508 IAW MIL-HDBK-454, GUIDELINE 4

NOTE: SPECIFICATIONS WILL VARY OVER OPERATING TEMPERATURE
NOTE: THE ABOVE SPECIFICATIONS ARE SUBJECT TO CHANGE OR REVISION

ALL DIMENSIONS ARE IN INCHES
TOLERANCES:
X.XX ±0.020
X.XXX ±0.010

REVISIONS				
ZONE	REV.	DESCRIPTION	DATE	APPROVED
	A1	ORIGINAL RELEASE	10/21/20	
	A2	ECN # 21-0093	05/25/21	
	E1	ECN # 21-0115	07/19/21	
	E2	ECN # 21-0214	12/20/21	
	E3	ECN # 22-0031	3/9/2022	



NO DAMAGE CONDITIONS

- Any combination of supply voltage at turn-on or loss of power.
- Reverse polarity of any voltage
- Any source and/or load VSWR including short or open with no time limitation.
- 27 dBm CW power input at the input and/or output connector with no time limitation.
- 30 dBm pulse (1 Sec, 0.1% duty cycle) at the input and/or output connector with no time limitation.
- Static charge (hand touch).

PMI CONFIDENTIAL AND PROPRIETARY

PLANAR MONOLITHICS INDUSTRIES, INC.

7311-F GROVE ROAD
FREDERICK, MARYLAND 21704 USA
TEL: 301-662-5019 FAX: 301-662-1731
WEBSITE: www.pmi-rf.com
E-MAIL: sales@pmi-rf.com
ISO 9001 CERTIFIED



APPROVALS		DATE	TITLE			
DRAWN <i>R. JPRK</i>		7/19/21	PRODUCT FEATURE SBA-218-63DB-6B-SFF			
CHECKED			SIZE A	FSCM NO. 05XQ0	DWG NO. 27039900	REV. E3
ISSUED			SCALE N:S	SHEET 1 OF 1		