DESCRIPTION

PMI MODEL: PLA-14D65G15G35G-20DB-SFF-250W IS AN INTEGRATED LIMITER AND ATTENUATOR THAT OPERATES AT 14.65 TO 15.35 GHz. THE INSERTION LOSS IS 3.59 dB MAXIMUM AND OFFERS 20 dB OF ATTENUATION CONTROL VIA A SINGLE LINE TTL SIGNAL. THIS MODEL IS DESIGNED TO HANDLE 125 WATTS PEAK HAVING A PULSE WIDTH OF 40 us AND AN AVERAGE POWER OF 12.5 WATTS.

SPECIFICATIONS

- FREQUENCY RANGE: 14.65 TO 15.35 GHz
- INSERTION LOSS: 3.59 dB MAX
- PEAK POWER HANDLING
  - LOW TEMP (-55 °C): 100 W MAX
  - ROOM TEMP (+25 °C): 125 W MAX
  - HIGH TEMP (+85 °C): 100 W MAX
- PULSE WIDTH: 40 μs TYP
- AVERAGE POWER
  - LOW TEMP (-55 °C): 10 W MAX
  - ROOM TEMP (+25 °C): 12.5 W MAX
  - HIGH TEMP (+85 °C): 10 W MAX
- ATTENUATION:
  - LOGIC TTL "0": -0 dB ATTENUATION
  - LOGIC TTL "1": -20 dB ATTENUATION
- ATTENUATION FLATNESS: ±1 dB MAX
- ATTENUATION ACCURACY: ±1 dB MAX
- P1dB LIMITING THRESHOLD: +5 dBm MIN
  1. @ -10 dBm INPUT AND 0 dB ATTENUATION
  2. @ 0 dB AND 20 dB ATTENUATION @ 10% DUTY CYCLE

- FLAT LEAKAGE
  - LOW TEMP (-55 °C): +20 dBm MAX @ 0 dB ATTENUATION AND 100 W MAX
  - ROOM TEMP (+25 °C): +20 dBm MAX @ 0 dB ATTENUATION AND 125 W MAX
  - HIGH TEMP (+85 °C): +20 dBm MAX @ 0 dB ATTENUATION AND 100 W MAX
- SWITCHING SPEED:
  - 90 ns @ 50% TTL TO 10% RF VOLTAGE MAX
  - 90 ns @ 50% TTL TO 90% RF VOLTAGE MAX
- CONTROL LOGIC:
  - TTL COMPATIBLE
- PHASE MATCH:
  - 15° MAX (UNIT TO UNIT)
- DC CONSUMPTION:
  - 150 mA MAX EACH FOR +5 V & -15 V
- VSWR:
  - 2.0:1 MAX @ -10 dBm INPUT
- RF CONNECTORS:
  - REMOVABLE SMA FEMALE
    (J2 - RF INPUT & J1 - RF OUTPUT)
- FINISH:
  - 0003 SILVER PLATE OVER COPPER FLASH IAW QQ-S-365 TYPE 1, GRADE A

ENVIRONMENTAL RATINGS

- TEMPERATURE: -55 °C TO +85 °C (OPERATING)
  -55 °C TO +125 °C (STORAGE)
- HUMIDITY: MIL-STD-810F
- SHOCK: MIL-STD-810F, METHOD 516.5, PROCEDURE 1
- VIBRATION: MIL-STD-810F, METHOD 514.5
- ALTITUDE: MIL-STD-810F, METHOD 520.2, PROCEDURE 3
- TEMPERATURE CYCLE: MIL-STD-810F, METHOD 501.4, 502.4

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

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MECHANICAL OUTLINE

0.059 [1.50]

0.291 [7.40]

0.283 [7.20]

0.059 [1.50]

0.173 [4.40]

0.283 [7.20]

0.630 [16.00]

0.071 [1.80]

 Ø0.071 [Ø1.80]

THRU 6 PLACES

0.236 [6.00]

4 PLACES

0.012 DIA
[0.304]

2 PLACES

0.256 [6.50]

0.12 [3.00] 3 PLACES

0.112 [2.85]

0.315 [8.00]

0.148 [3.75]

WARNING: INPUT IS NOT DC BLOCKED

PLANAR MONOLITHICS INDUSTRIES

MODEL NO:
PLA-14D65G15G35G-20DB-SFF-250W

SERIAL NO:
PLXXX00000000

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ISO 9001 CERTIFIED

DIMENSIONS ARE IN INCHES AND [mm]
TOLERANCES:
X.XXX ±0.001 (±0.03)
X.XXX ±0.002 (±0.05)
X.XXX ±0.003 (±0.075)

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PRODUCT FEATURE
PLA-14D65G15G35G-20DB-SFF-250W
LIMITER ATTENUATOR

APPROVALS

DRAWN

M. BERRY

11/01/14

CHECKED

05XQ0

27029631

B1

SCALE

N.S

SHRIT
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