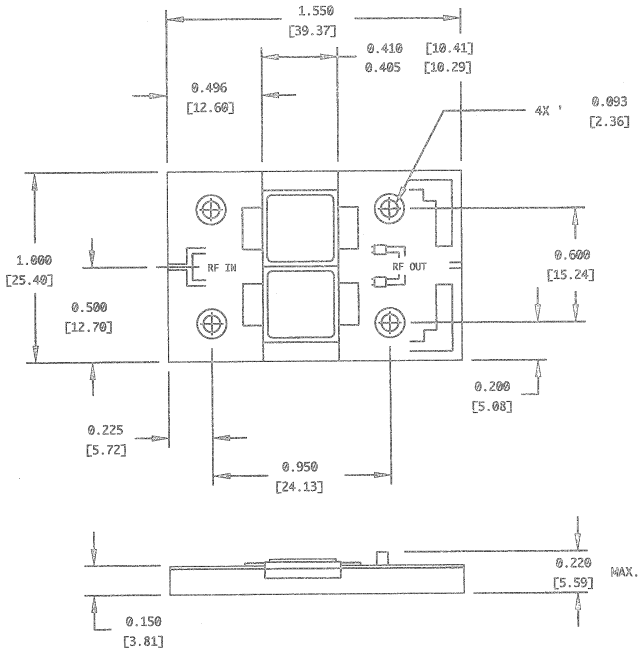
Radar Pulsed Power Module, 140W, 300µs, 10% Duty 2.7 - 3.1 GHz

PHA2731-140L

V4.00

Features

- NPN Silicon Power Transistors
- Input and Output Matched to 50Ω
- Duroid Circuit Board
- Easily Combined For High Power Transmitters
- Plated Copper Flange



Unless Otherwise Noted, Tolerances Are:
Inches -0.005˝ (Millimeters -0.13mm)

Absolute Maximum Ratings at 25°C[1]

Parameter	Absolute Maximum
Supply Voltage	40V
Input Power	35W
Output Power	200W
Thermal Resistance	0.8°C/W
Power Dissipation	380W
Operating Case Temp.	-30 to +100°C
Storage Temperature	-40 to +125°C

1. Operation of this device outside any of these limits may cause permanent damage.

Electrical Characteristics at 25°C

Parameter	Symbol	Test Conditions	Units	Min.	Max.
Output Power	P_{OUT}	V_{CC}=36 V, P_{IN}=28 W, F=2.70, 2.90, 3.10 GHz	W	140	-
Power Gain	G_P	V_{CC}=36 V, P_{OUT}=140 W, F=2.70, 2.90, 3.10 GHz	dB	7	-
Collector Efficiency	η_C	V_{CC}=36 V, P_{OUT}=140 W, F=2.70, 2.90, 3.10 GHz	%	35	-
Input VSWR	VSWR	V_{CC}=36 V, P_{OUT}=140 W, F=2.70, 2.90, 3.10 GHz	-	-	2:1
Load VSWR Tolerance	VSWR-T	V_{CC}=36 V, P_{OUT}=140 W, F=2.70, 2.90, 3.10 GHz	-	-	2:1
Load VSWR for Stability	VSWR-S	V_{CC}=36 V, P_{OUT}=140 W, F=2.70, 2.90, 3.10 GHz	-	-	1.5:1
Pulse Droop	Dp	V_{CC}=36 V, P_{OUT}=140 W, F=2.70, 2.90, 3.10 GHz	dB	-	1

North America: Tel. (800) 366-2266 Fax (800) 618-8883 ■ Asia/Pacific: Tel. +81 (03) 3226-1671 Fax +81 (03) 3226-1451 ■ Europe: Tel. +44 (1344) 869 595 Fax +44 (1344) 300 020