

PHA2731-140L

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

Rev. V4

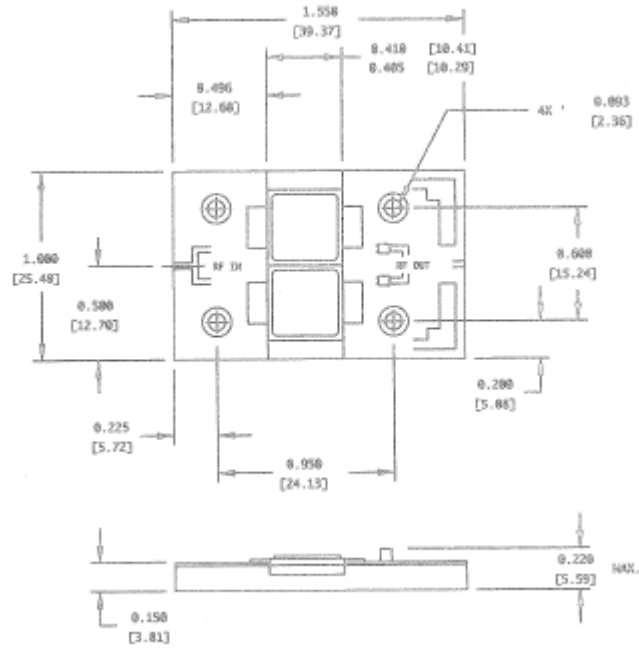
Features

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

Absolute Maximum Ratings at 25°C¹

Parameter	Absolute Maximum
Supply Voltage	40V
Input Power	35W
Output Power	200W
Thermal Resistance	0.4° 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.



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

Electrical Characteristics at 25 C

Parameter	Symbol	Test Conditions	Units	Min.	Max.
Output Power	P _{OUT}	V _{CC} =36, P _{IN} =28 W, F=2.70, 2.90, 3.10 GHz	W	140	-
Power Gain	G _P	V _{CC} =36, P _{OUT} =140 W, F=2.70, 2.90, 3.10 GHz	dB	7	-
Collector Efficiency	η_C	V _{CC} =36, P _{OUT} =140 W, F=2.70, 2.90, 3.10 GHz	%	35	-
Input VSWR	VSWR	V _{CC} =36, P _{OUT} =140 W, F=2.70, 2.90, 3.10 GHz	-	-	2:1
Load VSWR Tolerance	VSWR-T	V _{CC} =36, P _{OUT} =140 W, F=2.70, 2.90, 3.10 GHz	-	-	2:1
Load VSWR for Stability	VSWR-S	V _{CC} =36, P _{OUT} =140 W, F=2.70, 2.90, 3.10 GHz	-	-	1:5:1
Pulse Droop	D _P	V _{CC} =36, P _{OUT} =140 W, F=2.70, 2.90, 3.10 GHz	dB	-	1