



Radar Pulsed Power Module, 115, 130, 145W, 100µs Pulse 3.1 - 3.5 GHz

PHA3135-130M

V4.00

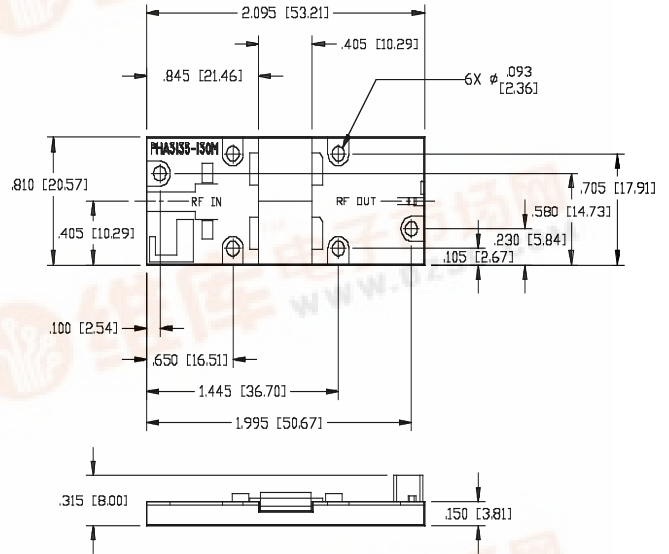
Features

- NPN Silicon Power Transistor
- Input and Output Matched to 50Ω
- 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	26.5W
Output Power @ 3.3 GHz	200W
Thermal Resistance / Per Transistor	0.24A
Power Dissipation	400W
Operating Case Temp.	-30 to 120°C
Storage Temperature	-40 to +125°C

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



Unless Otherwise Noted, Tolerances Are: Inches ±.005" (Millimeters ±13mm)

Electrical Characteristics at 25°C

Parameter	Symbol	Test Conditions	Units	Min.	Max.
Output Power	P _{OUT}	V _{CC} =36 V, P _{IN} =21 W, F=3.1 GHz	W	145	-
Output Power	P _{OUT}	V _{CC} =36 V, P _{IN} =21 W, F=3.3 GHz	W	130	-
Output Power	P _{OUT}	V _{CC} =36 V, P _{IN} =21 W, F=3.5 GHz	W	115	-
Power Gain	G _P	V _{CC} =36 V, P _{IN} =21 W, F=3.1 GHz	dB	8.4	-
Power Gain	G _P	V _{CC} =36 V, P _{IN} =21 W, F=3.3 GHz	dB	7.9	-
Power Gain	G _P	V _{CC} =36 V, P _{IN} =21 W, F=3.5 GHz	dB	7.4	-
Collector Efficiency	η _C	V _{CC} =36 V, P _{IN} =21 W, F=3.1, 3.3, 3.5 GHz	%	35	-
Input Return Loss	RL	V _{CC} =36 V, P _{IN} =21 W, F=3.1, 3.3, 3.5 GHz	dB	6	-
Load VSWR Tolerance	VSWR-T	V _{CC} =36 V, P _{IN} =21 W, F=3.1, 3.3, 3.5 GHz	-	-	3:1
Load VSWR Stability	VSWR-S	V _{CC} =36 V, P _{IN} =21 W, F=3.1, 3.3, 3.5 GHz	-	-	2:1