mail

Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from, Europe, America and south Asia, supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of "Quality Parts, Customers Priority, Honest Operation, and Considerate Service", our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip, ALPS, ROHM, Xilinx, Pulse, ON, Everlight and Freescale. Main products comprise IC, Modules, Potentiometer, IC Socket, Relay, Connector. Our parts cover such applications as commercial, industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!



Contact us

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Radar Pulsed Power Module, 240W 2700MHz to 2900MHz, 100µS Pulse, 10% Duty

Features

- In-phase combined pulsed power transistors
- Input and output matched to 50 Ohms
- Soft substrate circuit board
- Nickel plated copper flange
- Easily combined for high power transmitters
- MTTF>1x10⁶ hrs at Tflange=45°C

Parameter	Symbol	Rating	Units
Supply Voltage	Vcc	40	V
Input Power	Pin	55	Wpk
Output Power	Pout	325	Wpk
Thermal Resistance	θ _{JC}	0.35	°C/W
Total Power Dissipation	PD	500	W
Operating Case Temp.	T _C	-30 to +100	°C
Storage Temp.	T _{STG}	-40 to +125	°C

ABSOLUTE MAXIMUM RATINGS AT 25°C



UNLESS OTHERWISE NOTED, TOLERANCES ARE INDRES ±,005" [MILLMETERS ±0.13444]

ELECTRICAL CHARACTERISTICS AT 25°C

Parameter	Symbol	Min	Max	Units	Test Conditions
Input Power	P _{IN}	-	44	Wpk	V _{CC} = 36V, P _{out} =240Wpk, F=2.7, 2.8, 2.9GHz
Collector Current	lc	-	16.97	А	V _{CC} = 36V, Pout =240Wpk), F =2.7, 2.8, 2.9GHz
Input Return Loss	RL	10	-	dB	V _{CC} = 36V, P _{out} = 240Wpk, F =2.7, 2.8, 2.9GHz
Pulse Amplitude Droop	Droop	-	0.7	dB	V _{CC} = 36V, P _{out} = 240Wpk, F =2.7, 2.8, 2.9GHz
2nd Harmonic	2fc	-	-20	dB	V _{CC} = 36V, P _{out} = 240Wpk, F =2.7, 2.8, 2.9GHz
Insertion Phase Deviation	Δφ	-20	+20	Degrees	V _{CC} = 36V, P _{out} = 240Wpk, F =2.7, 2.8, 2.9GHz
Load Mismatch Stability	VSWR-S	-	1.5:1	-	V _{CC} = 36V, P _{out} = 240Wpk, F =2.7, 2.8, 2.9GHz
Overdrive/Load Mismatch Tolerance	OD/ VSWR-T	-	2:1	-	V _{CC} = 36V, Pin=(Pin@P _{out} =240Wpk)+0.6dB, F =2.7, 2.8, 2.9GHz

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Released—11-04-2002

PHA2729-240M

Radar Pulsed Power Module, 240W 2700MHz to 2900MHz, 100µS Pulse, 10% Duty

Typical Performance Curves

Collector Efficiency and Power Gain vs. Power Output Vcc=36VDC, Pulse Width=100µS, Duty=10%, 2.7GHz



Collector Efficiency and Power Gain vs. Power Output Vcc=36VDC, Pulse Width=100µS, Duty=10%, 2.8GHz



2

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PHA2729-240M

Radar Pulsed Power Module, 240W 2700MHz to 2900MHz, 100µS Pulse, 10% Duty



Released—11-04-2002

Collector Efficiency and Power Gain vs. Power Output Vcc=36VDC, Pulse Width=100 μ S, Duty=10%, 2.9GHz



3

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