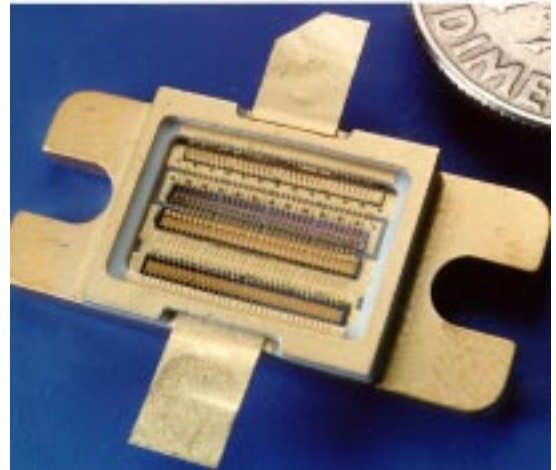


**WPTB32A1214A
Class C 1215-1400 MHz****BIPOLAR RF TRANSISTORS****PRODUCT DESCRIPTION**

The **WPTB32A1214Ax** is a high-power NPN transistor designed for pulsed radar applications. The 3217 L-Band die utilized in this device is capable of operating over a wide range of pulse widths, duty cycles and bandwidths. An application-specific design can easily be tailored to your requirements through minor changes in ballast resistor value and internal matching network values.

FEATURES

- Refractory/Gold Metalization
- Metal/Ceramic Hermetic Package
- Typical power out of 250 watts
- Two Stage Internal Matching
- Single Transistor Die Implementation

**ABSOLUTE MAXIMUM RATINGS**

Storage Temperature	-65 to 200 C
Operating Junction Temperature.....	200° C
Lead temperature (Soldering 10 sec)	300° C
Collector-Base Voltage	80V
Emitter-Base Voltage	3V
Peak Collector Current.....	18A
Transient Thermal Resistance.....	0.18°C/W

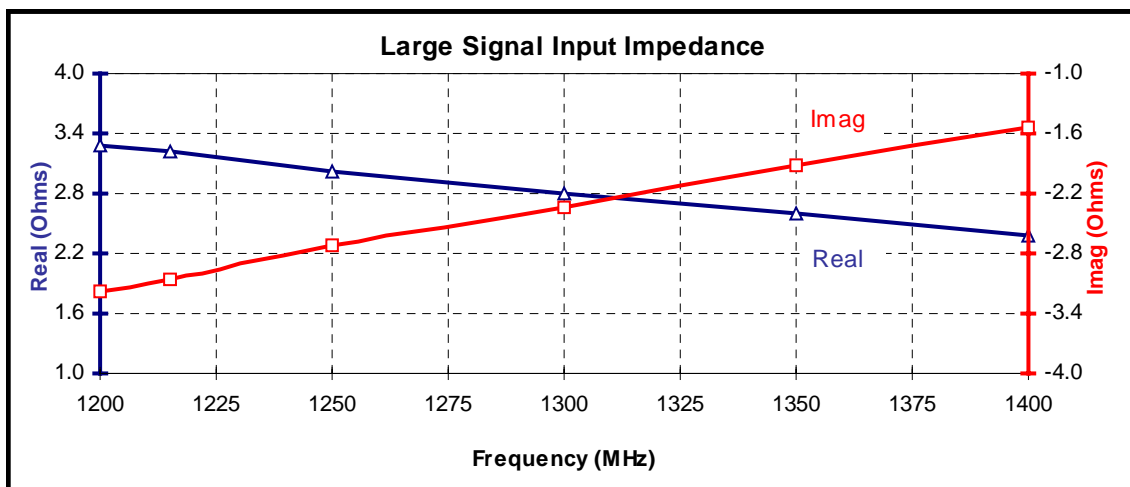
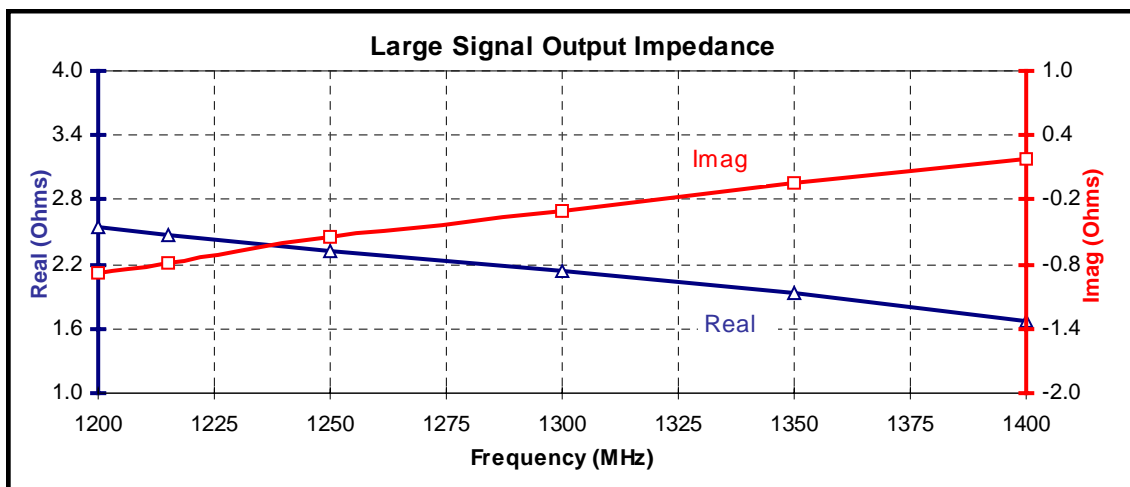
Northrop Grumman Corporation
Electronic Systems
P.O. Box 1521, MS 3D14
Baltimore, MD 21203 USA
Telephone: (410) 765-7469
Fax: (410) 694-2977
Email: m.fitzpatrick@ngc.com

NORTHROP GRUMMAN

Electronic Sensors and
Systems Sector

Electrical Performance

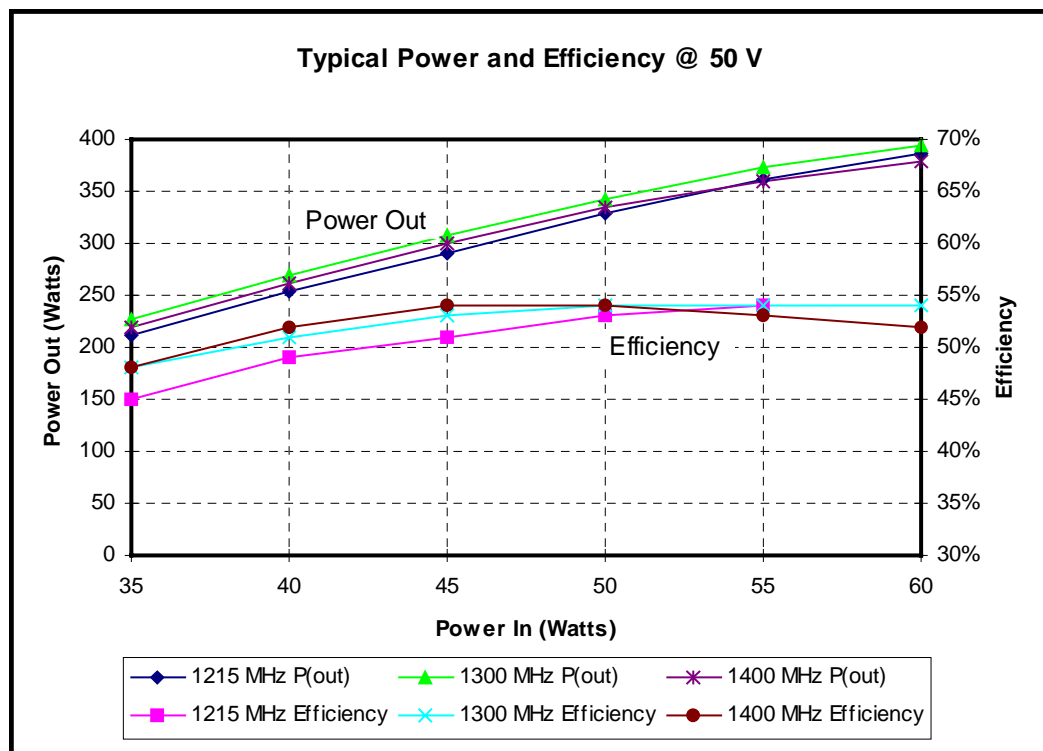
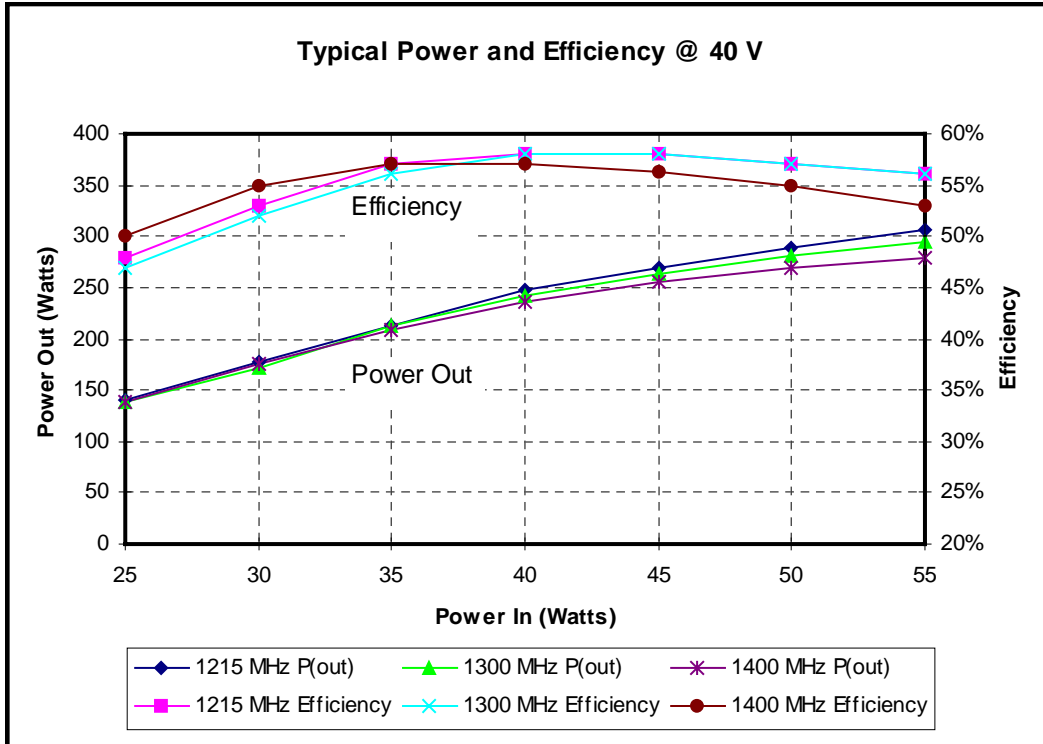
Characteristic	Symbol	Min	Typ	Max	Units	Test Conditions
Collector-Base Breakdown Voltage	BV_{cbo}	70	85		Volts	$I = 10 \text{ mA}$
Emitter-Base Breakdown Voltage	BV_{ebo}	3			Volts	$I = 10 \text{ mA}$
Forward Current Transfer Ratio	H_{fe}	20	45	80		$V_{ce} = 5 \text{ V}$ $I_c = 500 \text{ mA}$
Common Base Power Gain		7.2		8.5	dB	$P_{in} = 42 \text{ W}$ $V_{cc} = 40 \text{ V}$ $150 \mu\text{s } 5\% \text{ duty}$
Collector Efficiency		53			%	See Above
Load Mismatch Tolerance		3:1			VSWR	
Frequency Band		1215		1400	MHz	



NORTHROP GRUMMAN

Electronic Sensors and
Systems Sector

Power Out and Efficiency

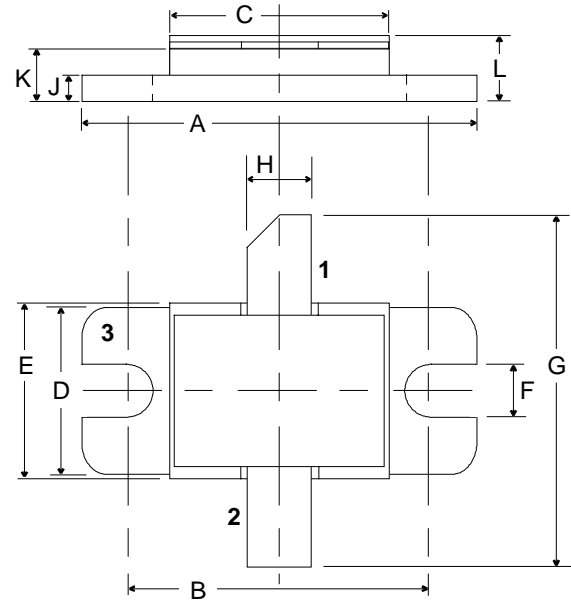


NORTHROP GRUMMAN

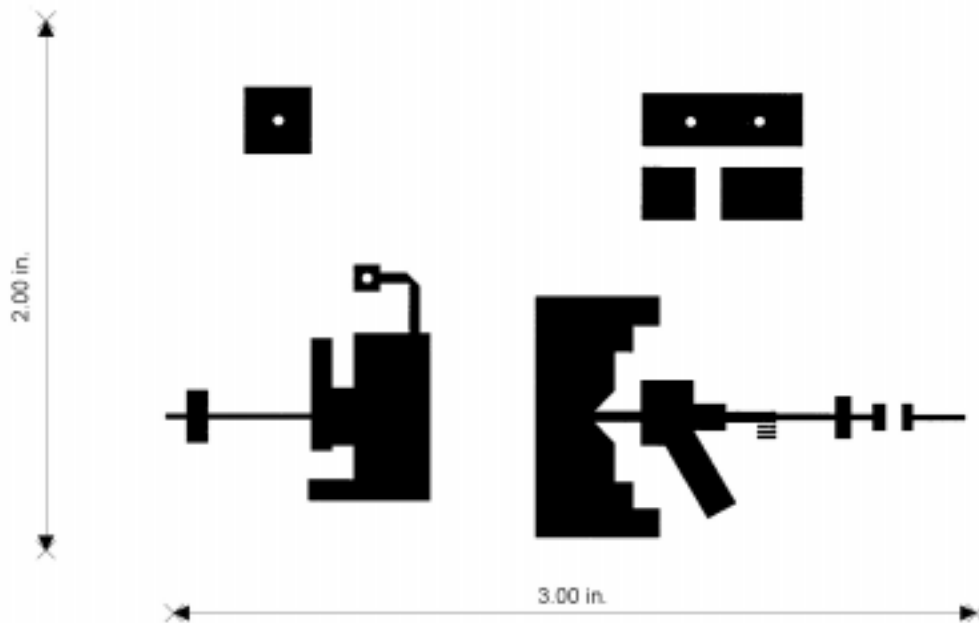
Electronic Sensors and
Systems Division

Mechanical Data

Dimension	Inches		Millimeters	
	Min	Max	Min	Max
A	.890	.910	22.6	23.11
B	.695	.705	17.65	17.91
C	.495	.505	12.57	12.83
D	.380	.390	9.65	9.91
E	.395	.405	10.03	10.29
F	.115	.125	2.92	3.18
G	.770	.830	19.55	21.08
H	.145	.155	3.68	3.94
J	.055	.065	1.39	1.65
K	.110	.130	2.79	3.30
L	.150	.215	3.81	5.46



Terminals: 1 = Collector
2 = Emitter
3 = Base



TEST CIRCUIT ARTWORK - 25 mil dielectric - $\epsilon_r=10$

Export of these devices is subject to U.S. Government Regulation.

For more information, please contact:
Northrop Grumman Corporation
Electronic Systems
P.O. Box 1521, MS 3D14
Baltimore, MD 21203 USA
Telephone: (410) 765-7469
Fax: (410) 694-2977
Email: m.fitzpatrick@ngc.com

NORTHROP GRUMMAN

Electronic Sensors and
Systems Sector