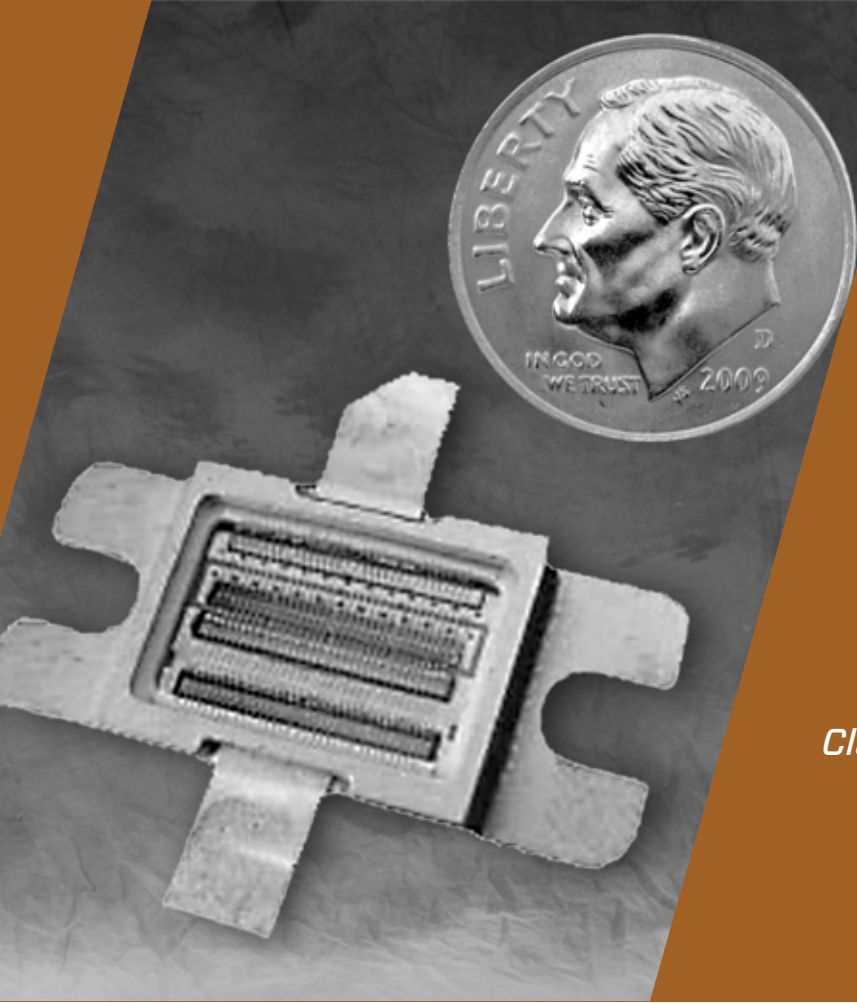


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Bipolar RF Transistors

Class C 960-1215 MHz

Product Description

The WPTB32A0912Ax application-specific transistor uses the 3217 L-Band die which was developed for pulse radar systems. Optimal internal matching delivers high performance for applications such as the MIDS and JTIDS communication systems. Low thermal resistance and high efficiency couple to provide nearly imperceptible droop across the entire TDMA burst waveform at power levels of over 200 watts.

Features

- Refractory/Gold Metalization
- Metal/Ceramic Hermetic Package
- Typical Power Out of 180 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.....	0.35°C/W

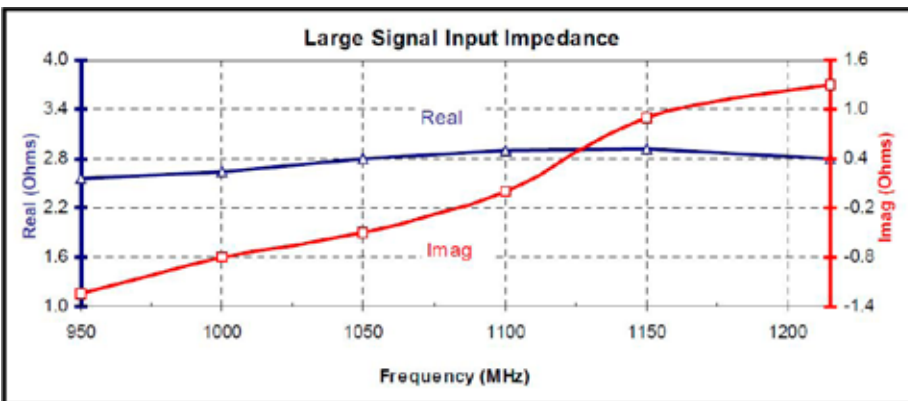
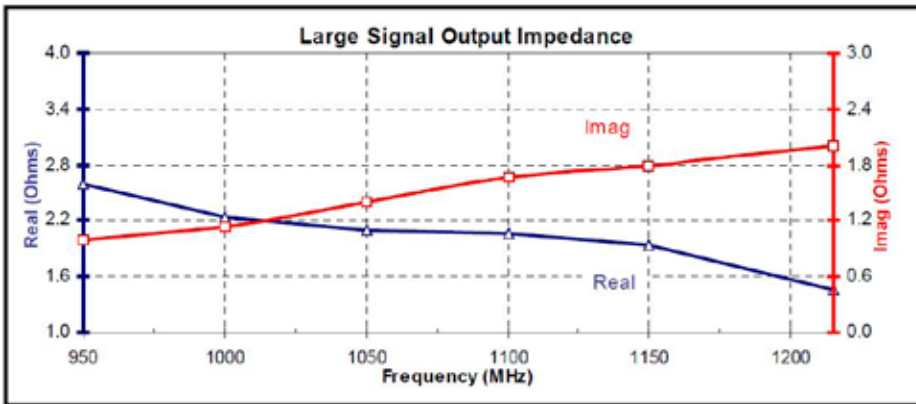
Electrical Performance

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	50	90		$V_{ce} = 5 \text{ V}$ $I_c = 500 \text{ mA}$
Common Base Power Gain		7.4		9	dB	Note 1.
Collector Efficiency		48			%	Note 2.
Load Mismatch Tolerance		3:1			VSWR	Note 1.
Frequency Band		960		1215	MHz	

Note 1: Pulse format of 6.4 μs ON, 6.6 μs OFF for 3.3 ms, then OFF for 4.6 ms.

Burst tests performed at $P_{out} = 180 \text{ watts}$.

Note 2: 6.4 μs pulses, 5% duty



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Specifications and features subject to change without notice.

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