

Pulsed RF Amplifier Data Sheet
BT-GammaA series
500W



The BT-GammaA series is a range of class AB RF power amplifiers covering the 5MHz-150MHz frequency range

- Rugged, solid-state design - high reliability
- Extremely high phase and amplitude stability
- Very fast pulse rise/fall times
- High linearity
- Low power CW operation
- Very low interpulse noise
- Competitively priced

Suitable for pulsed radar, NMR, MRI, NQR,EPR, ultrasound systems and other scientific applications.

BT-GammaA series

Model number	BT00500-GamnmaA
Rated power	500W minimum[1]
P1dB	400W minimum[2]
Type	Class AB MOSFET
Frequency	5MHz-150MHz
Gain flatness	±1.5dB maximum
Duty cycle	20% maximum[3]
Maximum pulse width	10ms or 100ms[4]
CW mode	50W typical[5]
Pulse droop	5% maximum
Phase change with power	<5^{O} from -40dB to full power
Phase stability	<1^{O} across 100ms pulse
Harmonics	Odd: -12dBc maximum Even:-20dBc maximum
Spurious	<-70dBC maximum
Rise/fall times	<100ns typical
Output noise (blanked)	<10dB above thermal (1MHz bandwidth)
Load SWR	Tolerates at least 3:1 at full rated power without shutdown[6]
Gate delay	1µs maximum
Output sample	-40dB into 50Ω

BT-GammaA series

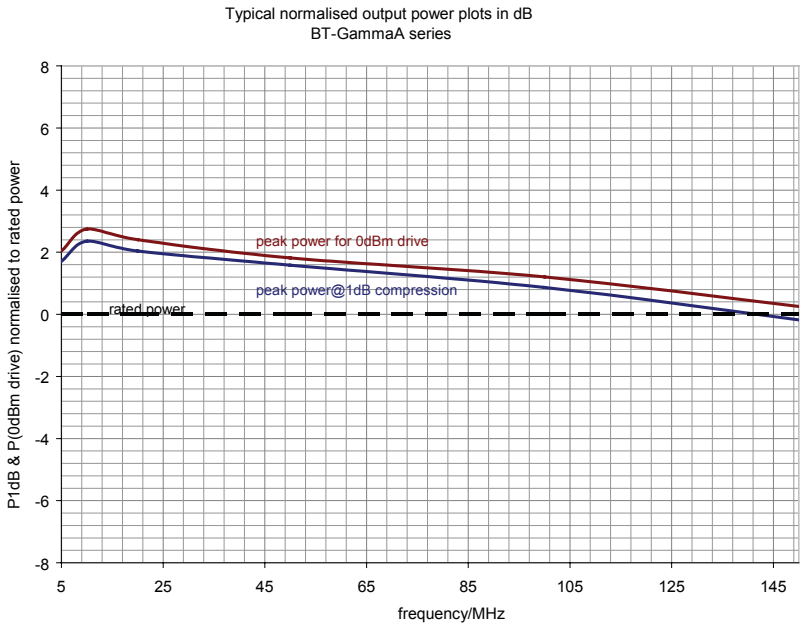
Input/output impedance	50 Ω nominal
Indicators	DC Power Output Enable RF Power Over-temp Over-duty Load mismatch
Status monitoring interface	Optional: RS232, RS422, RS485 supported
Cooling	Forced air
Drive signals: RF drive RF gate (blanking)	 0dBm nominal, 10dBm for no damage 0-5V CMOS
Physical	19" Wx 600mmD x 128mmH[7]
Connectors	RF output: N type RF input, gate, sample:BNC
Mains power requirements	110-240V, 50-60Hz, single phase, 500VA/1kVA maximum[8] 10ms.100ms models
Compliance	CE

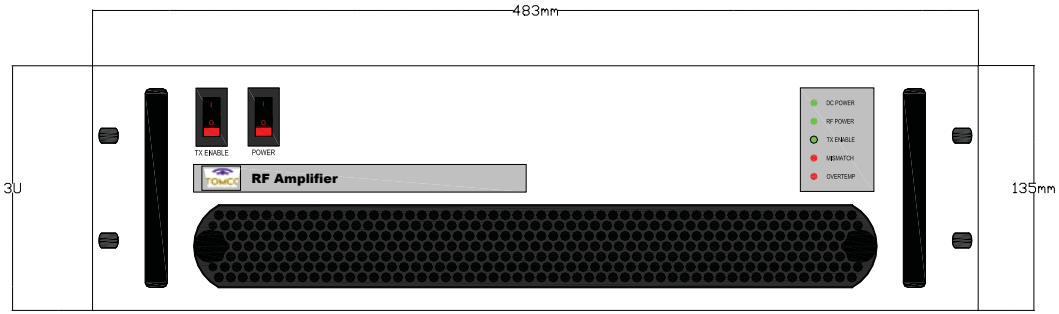
1. Input power=1mW
2. Minimum output power at 1dB gain compression
3. Maximum gate duty cycle
4. Maximum gate pulse width
5. CW operation automatically available at RF drive level~ -10dBm
6. Self resetting protection shuts the amplifier off if the load SWR is excessive
7. 3RU x 19" inch rack mounting
8. 3-pin IEC. Mains supply must include an earth

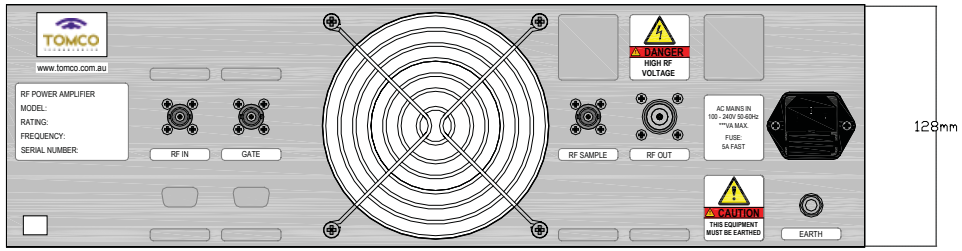
© Tomco Technologies

TOMCO
17 Clarke Street, Norwood. SA 5067 Australia.
Telephone: +618 8364 2203 Facsimile: +618 8364 2202.
Tomco Technologies © 1999-2007. All rights reserved.

Pulsed RF Amplifier Data Sheet
BT-GammaA series, 5-150MHz
500W







Tomco Technologies © 1999-2007. All rights reserved.