

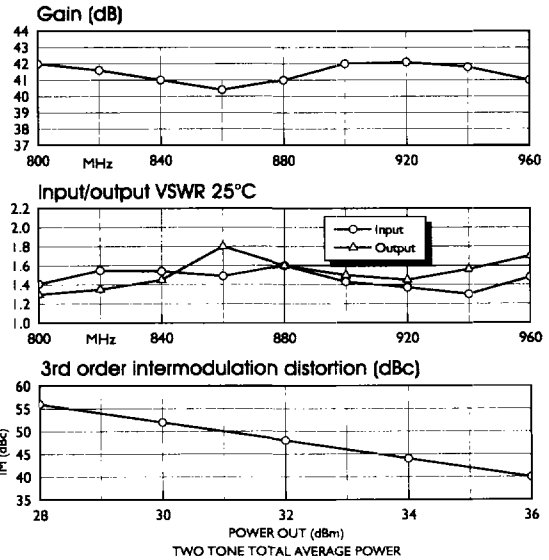
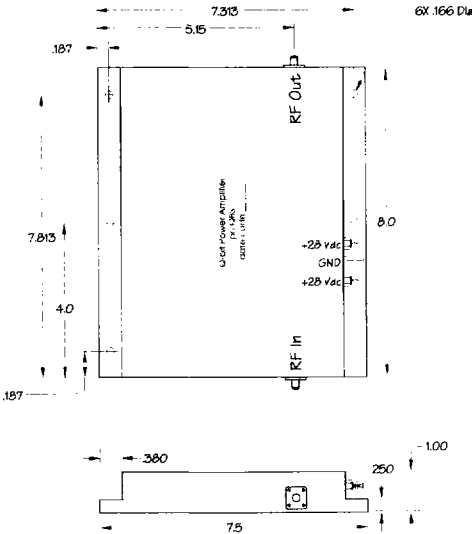
800 - 960 MHz 20 Watt Power Amplifier

QBS-230

The QBS-230 is a Class A, linear power amplifier for use in single and multi-tone applications over the 800 to 960 MHz frequency range. The amplifier is unconditionally stable over all magnitudes and angles of source and load impedance mismatch. Fault monitoring and variable gain options are available.

- **800 - 960 MHz Bandwidth**
- **P1db 20 Watts**
- **OIP3 +50 dBm**
- **Unconditionally Stable**

Parameters	Specification Limit		Units
CASE TEMPERATURE	+25	-20 to +60	°C
FREQUENCY RANGE	800 - 960		MHz
GAIN	40		dB Min
GAIN VS. TEMPERATURE	+2.0/-2.0		dB Max
GAIN FLATNESS	1.5		dB Max p-p
REVERSE ISOLATION	>60	60	dB Min
VSWR	2.0:1	2.0:1	Max
1 dB COMPRESSION	+42	+41	dBm Min
OUTPUT INTERCEPT POINT 3RD ORDER	+53	+51	dBm Min
DC POWER @ 24 Vdc ± 1%	4400	4600	mA Max
HOUSING	19272 (P-43)		



QBS-230 TYPICAL

MHz	S11		S21		S12		S22	
	dB	ANG	dB	ANG	dB	ANG	dB	ANG
800	-15.4	-84.9	42.0	-162.9	-68.0	126.2	-20.0	-55.2
820	-13.3	49.9	41.6	98.4	-71.7	174.5	-24.5	91.0
840	-13.5	14.2	41.0	5.4	-77.3	119.7	-13.7	34.2
860	-14.1	-17.1	40.4	87.1	-71.7	13.2	-11.8	-9.7
880	-12.7	-53.1	41.0	176.9	-66.9	38.4	-13.0	-49.6
900	-15.1	-104.3	42.0	78.9	-82.0	62.9	-17.3	-86.0
920	-16.2	-164.5	42.1	-27.5	-68.3	-41.0	-26.8	-106.3
940	-17.6	149.5	41.8	-142.0	-69.5	134.3	-22.4	-141.4
960	-14.3	104.1	41.0	102.6	-69.8	-96.0	-13.6	118.9

ABSOLUTE MAXIMUM RATINGS

Power supply voltage	
Sustaining	+30.0 Vdc
Pulse (transient)	+30.0 Vdc
Temperature	
Operating	-20 to +60°C
Storage	-55 to +125°C
Maximum Input Level	+15.0 dBm

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