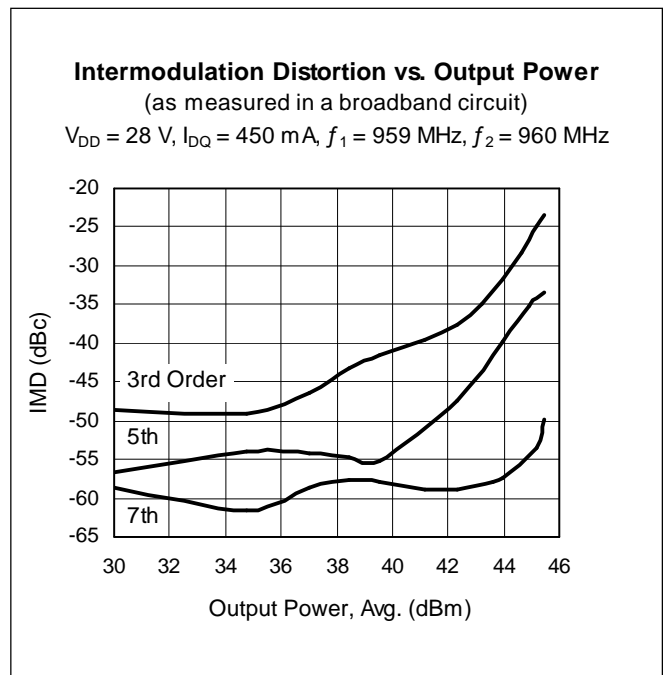
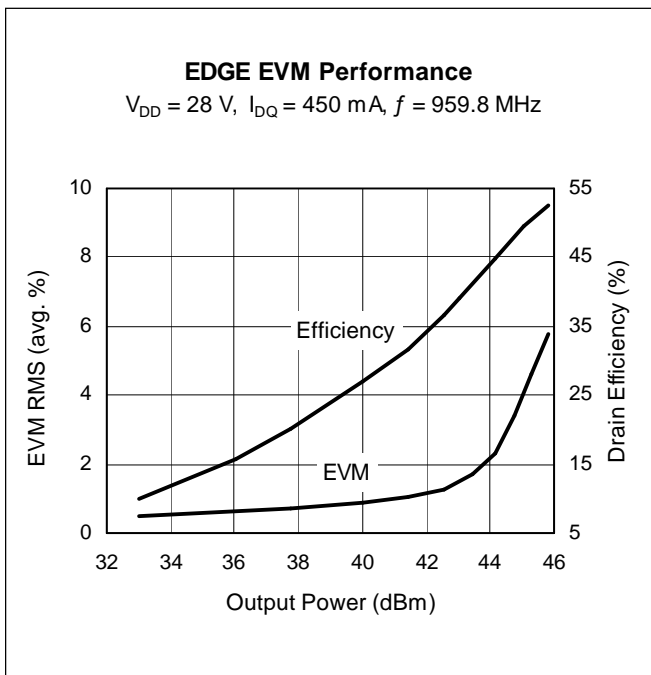
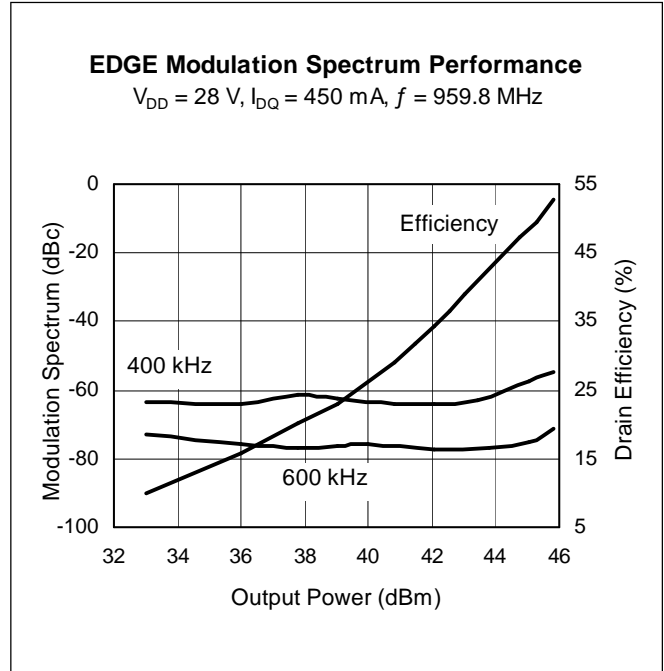
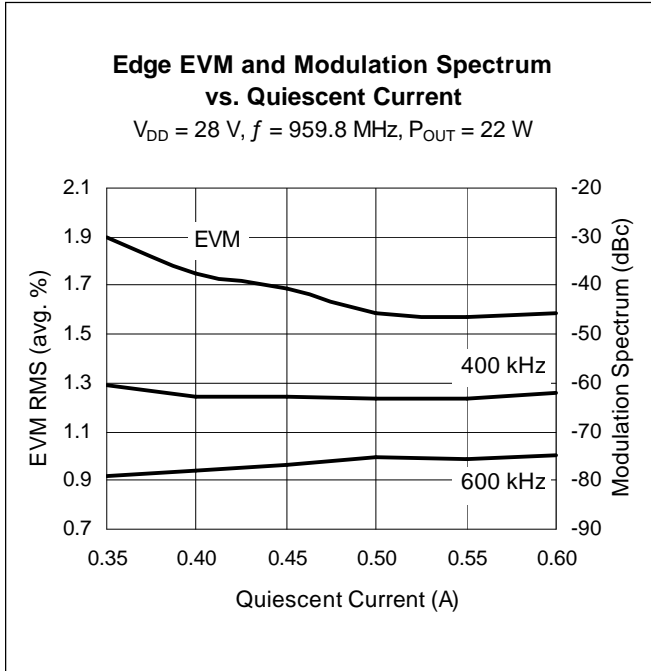
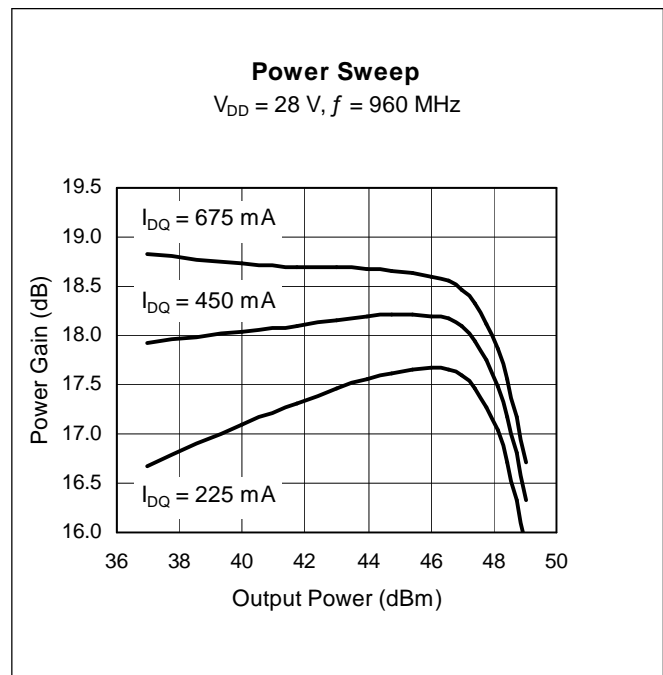
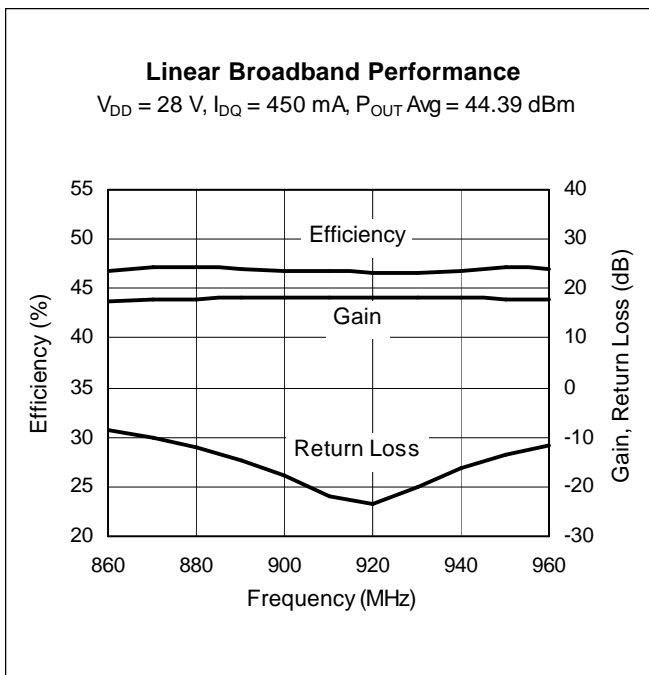
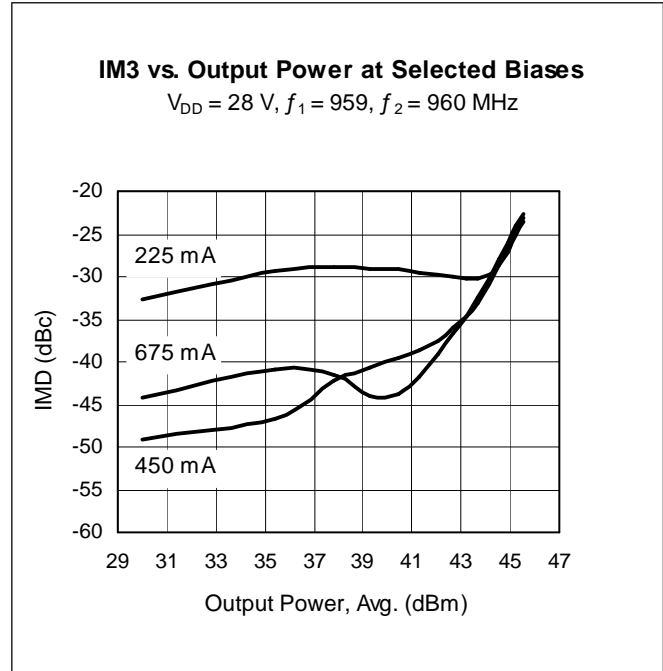
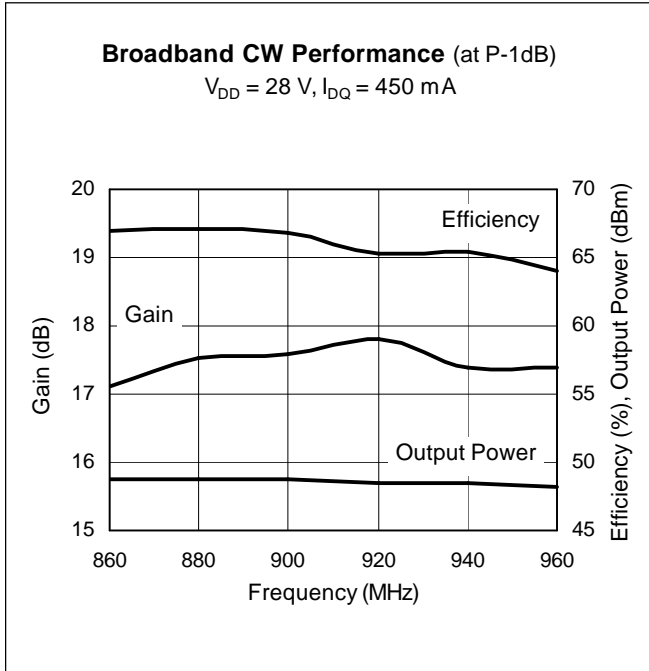


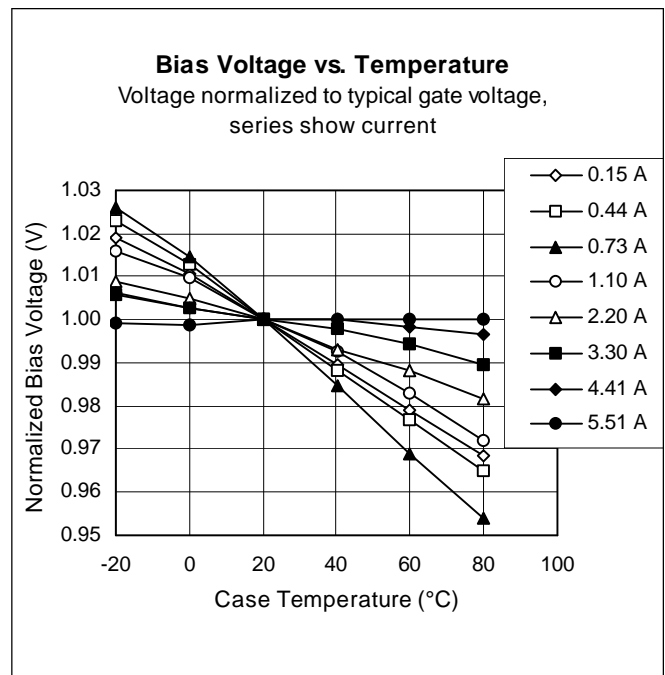
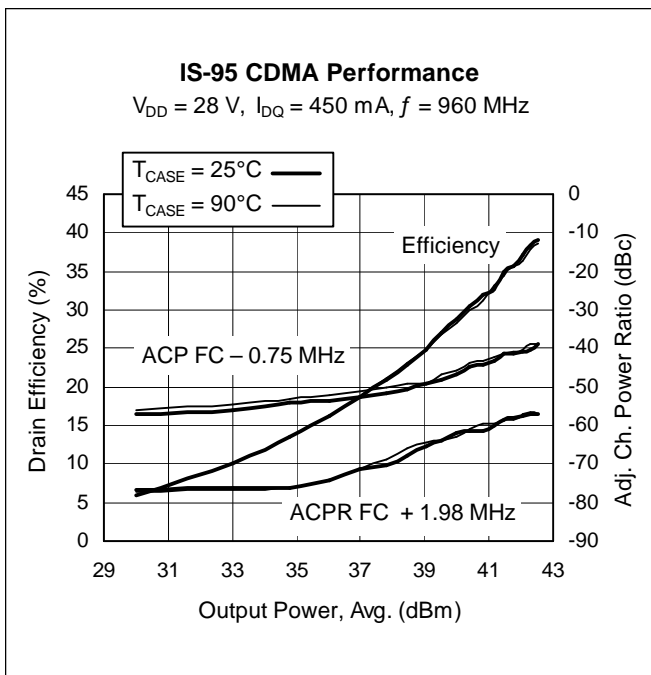
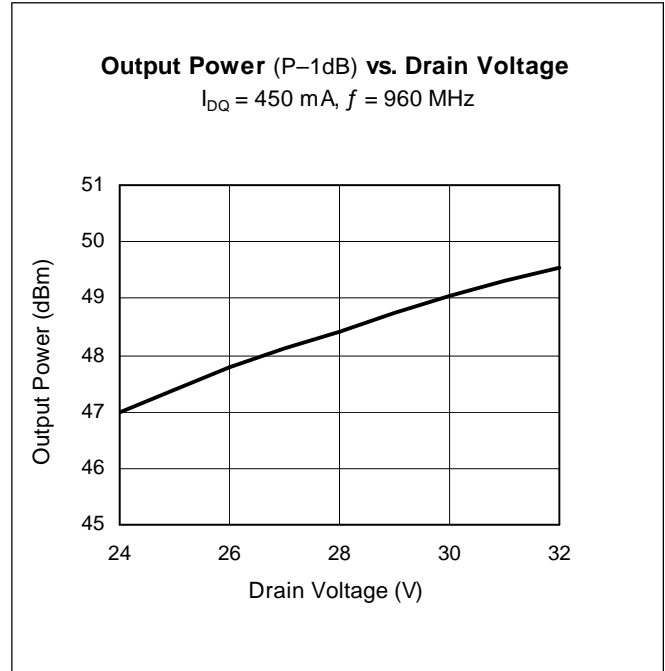
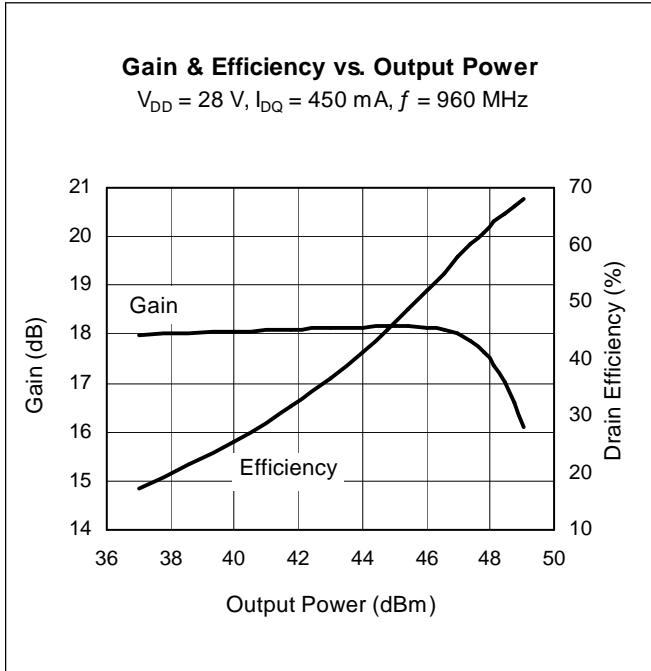
Typical Performance (data taken in a production test fixture)



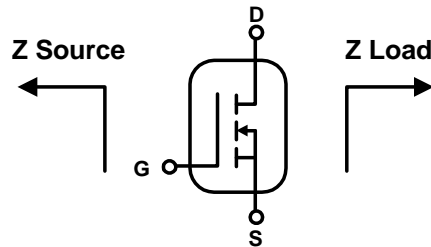
Typical Performance (cont.)



Typical Performance (cont.)



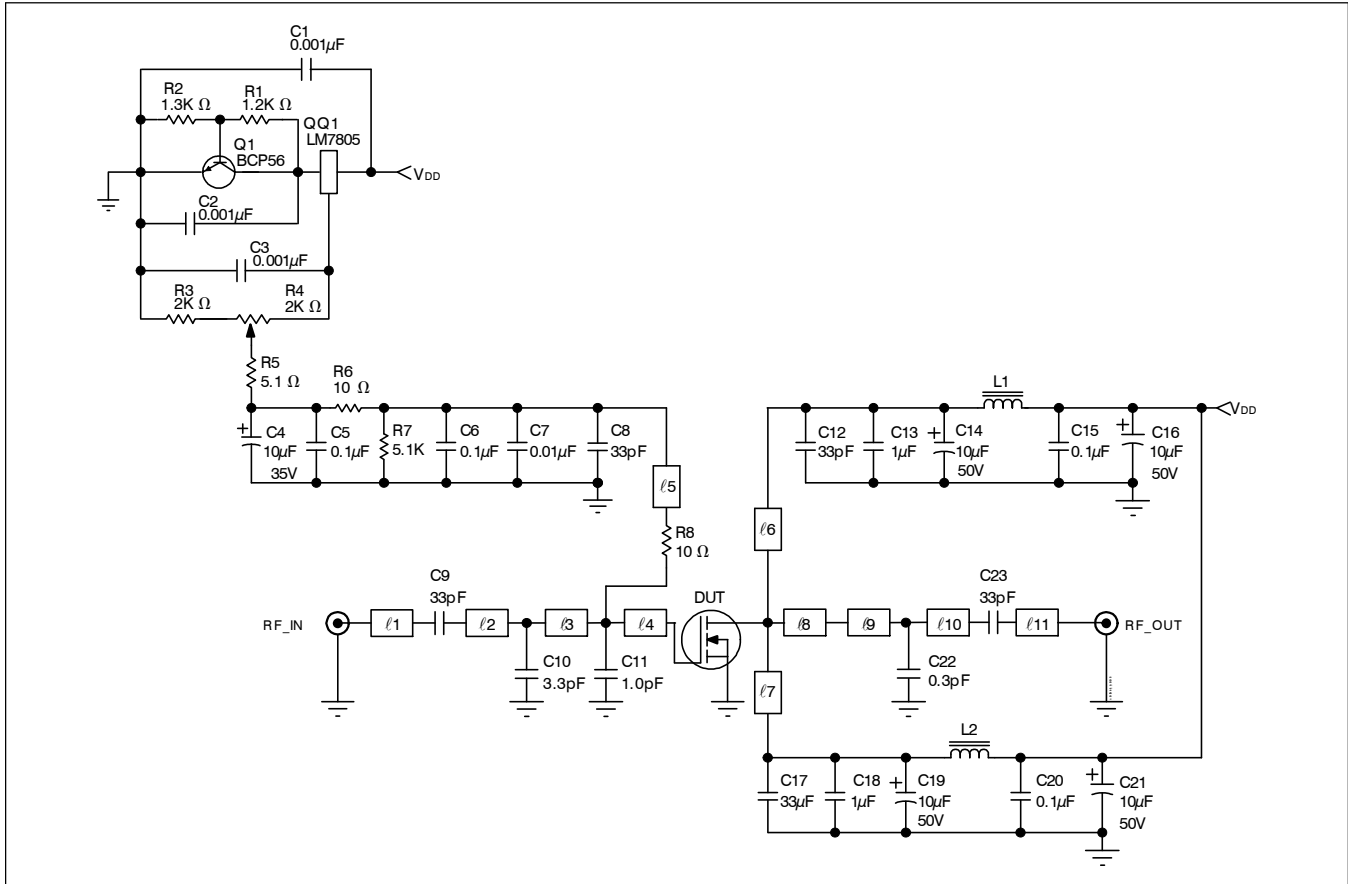
Broadband Circuit Impedance



Frequency MHz	Z Source W		Z Load W	
	R	jX	R	jX
869	8.91	-10.93	7.42	-1.63
880	3.72	-8.28	4.65	-1.74
894	5.93	-5.43	4.61	0.16
920	4.87	-7.16	4.88	-0.59
960	6.05	-5.57	4.89	0.86

See next page for circuit information

Reference Circuit



Reference circuit schematic diagram for $f = 960 \text{ MHz}$

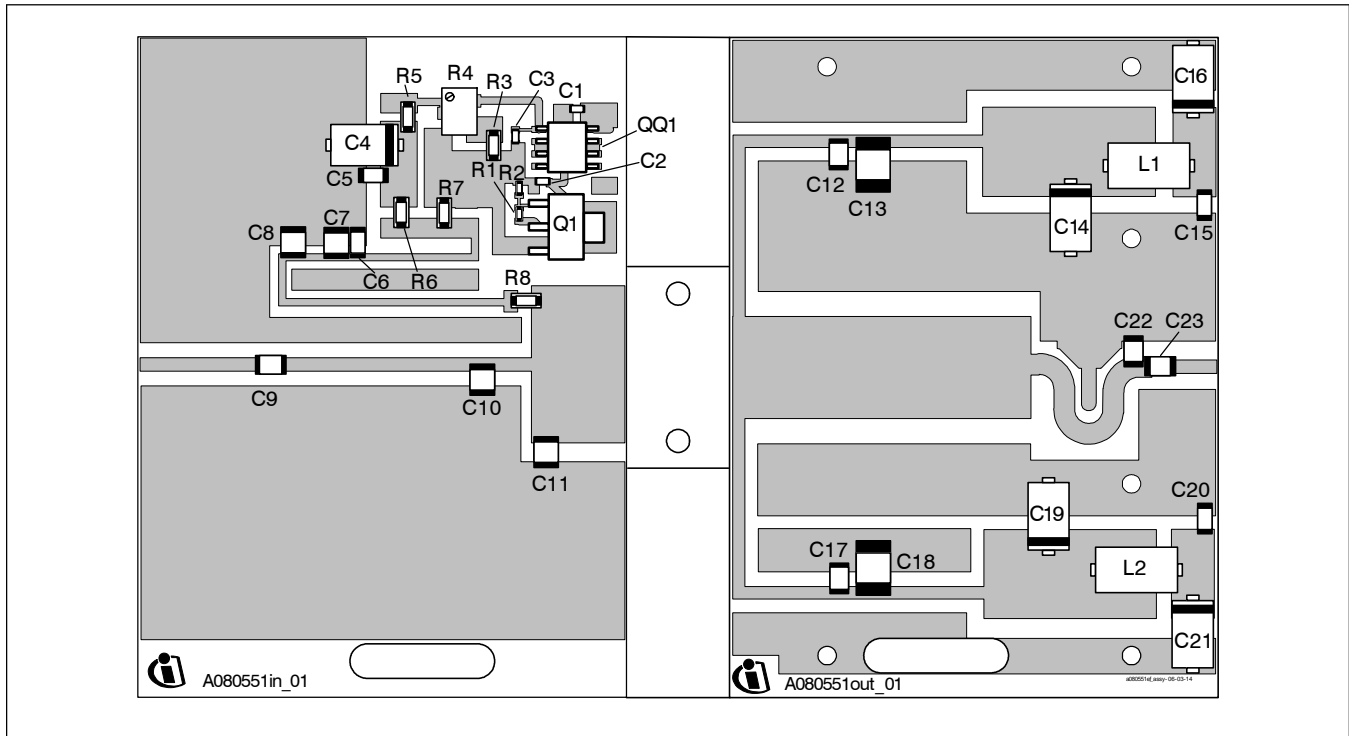
Circuit Assembly Information

DUT	PTFA080551E or PTFA080551F	LDMOS Transistor	
PCB	0.76 mm [.030"] thick, $\epsilon_r = 4.5$	Rogers TMM4	2 oz. copper

Microstrip	Electrical Characteristics at 960 MHz ¹	Dimensions: L x W (mm)	Dimensions: L x W (in.)
l_1	$0.070 \lambda, 50.0 \Omega$	12.19 x 1.37	0.480 x 0.054
l_2	$0.122 \lambda, 50.0 \Omega$	20.93 x 1.37	0.824 x 0.054
l_3	$0.031 \lambda, 50.0 \Omega$	5.31 x 1.37	0.209 x 0.054
l_4	$0.063 \lambda, 7.5 \Omega$	9.58 x 16.21	0.377 x 0.638
l_5	$0.162 \lambda, 67.0 \Omega$	28.45 x 0.79	1.120 x 0.031
l_6, l_7	$0.150 \lambda, 55.0 \Omega$	25.65 x 1.17	1.010 x 0.046
l_8	$0.198 \lambda, 11.1 \Omega$	30.73 x 10.46	1.210 x 0.412
l_9	$0.145 \lambda, 38.0 \Omega$	24.21 x 2.16	0.953 x 0.085
l_{10}	$0.009 \lambda, 38.0 \Omega$	1.52 x 2.16	0.060 x 0.085
l_{11}	$0.026 \lambda, 50.0 \Omega$	4.50 x 1.37	0.177 x 0.054

¹Electrical characteristics are rounded.

Reference Circuit (cont.)

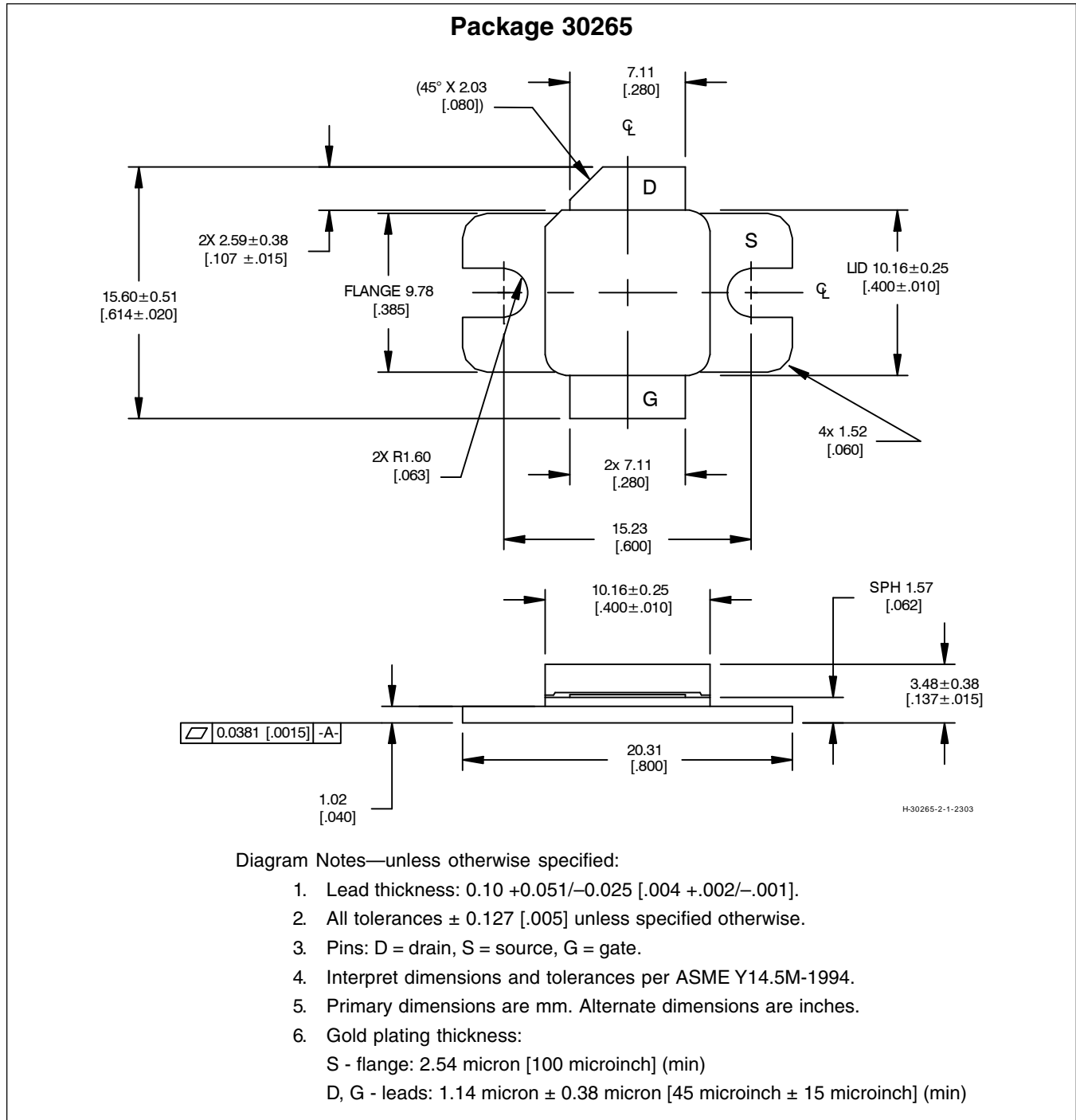


Reference circuit assembly diagram (not to scale)*

Component	Description	Suggested Manufacturer	P/N or Comment
C1, C2, C3	Capacitor, 0.001 μ F	Digi-Key	PCC1772CT-ND
C4	Tantalum capacitor, 10 μ F, 35 V	Digi-Key	399-1655-2-ND
C5, C6, C15, C20	Capacitor, 0.1 μ F	Digi-Key	PCC104BCT-ND
C8, C9, C12, C17, C23	Ceramic capacitor, 33 pF	ATC	100B 330
C7	Capacitor, 0.01 μ F	ATC	200B 103
C10	Ceramic capacitor, 3.3 pF	ATC	100B 3R3
C11	Ceramic capacitor, 1.0 pF	ATC	100B 1R0
C13, C18	Capacitor, 1.0 μ F	ATC	920C105
C14, C16, C19, C21	Tantalum capacitor, 10 μ F, 50 V	Garrett Electronics	TPSE106K050R0400
C22	Ceramic capacitor, 0.3 pF	ATC	100B 0R3
L1, L2	Ferrite, 8.9 mm	Elna Magnetics	BDS 4.6/3/8.9-4S2
Q1	Transistor	Infinion Technologies	BCP56
QQ1	Voltage regulator	National Semiconductor	LM7805
R1	Chip Resistor 1.2 k-ohms	Digi-Key	P1.2KGCT-ND
R2	Chip Resistor 1.3 k-ohms	Digi-Key	P1.3KGCT-ND
R3	Chip Resistor 2 k-ohms	Digi-Key	P2KECT-ND
R4	Potentiometer 2 k-ohms	Digi-Key	3224W-202ETR-ND
R5, R7	Chip Resistor 5.1 k-ohms	Digi-Key	P5.1KECT-ND
R6, R8	Chip Resistor 10 ohms	Digi-Key	P10ECT-ND

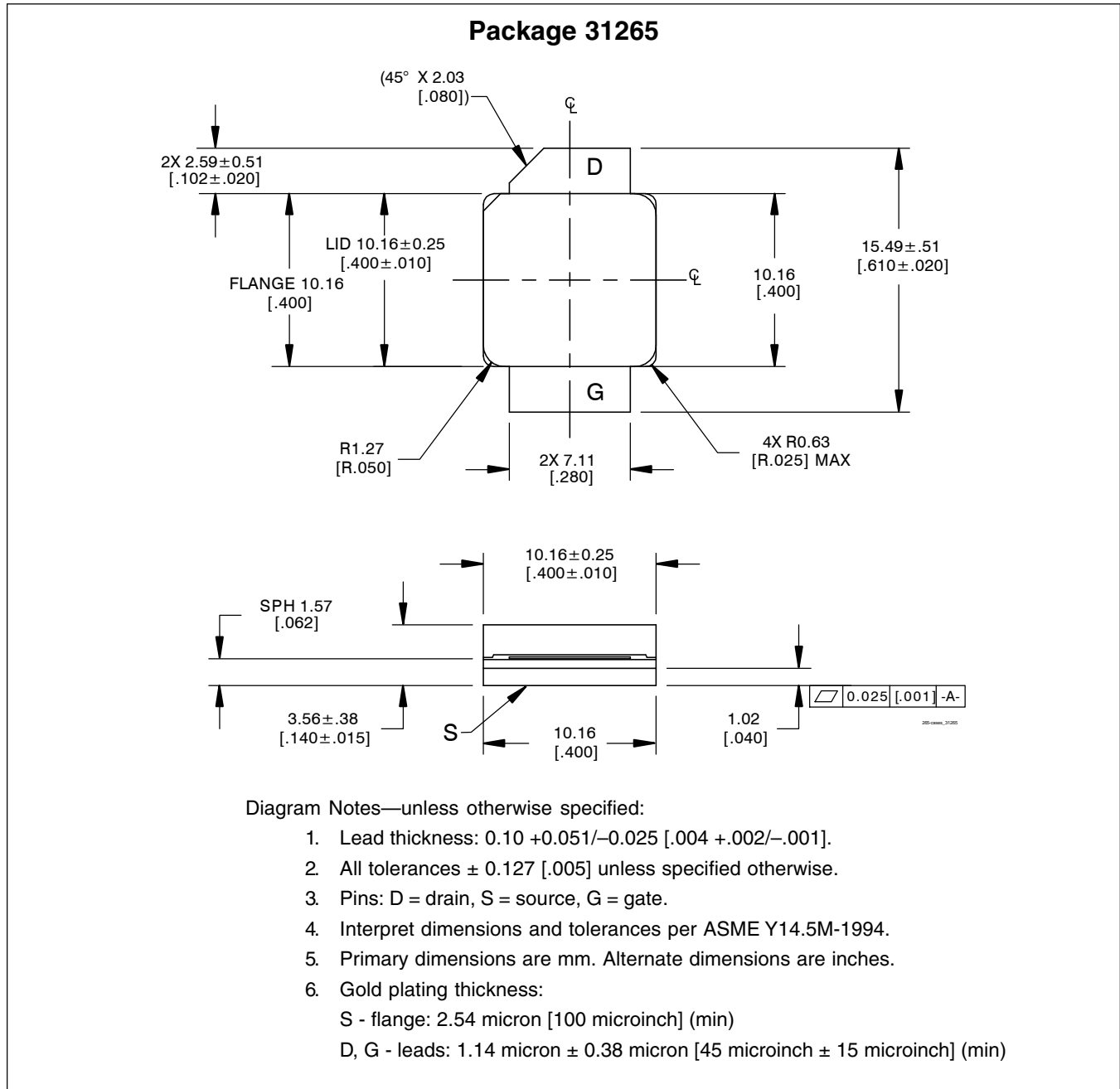
*Gerber Files for this circuit available on request

Package Outline Specifications



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Package Outline Specifications (cont.)



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Page	Subjects (major changes since last revision)

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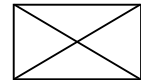
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