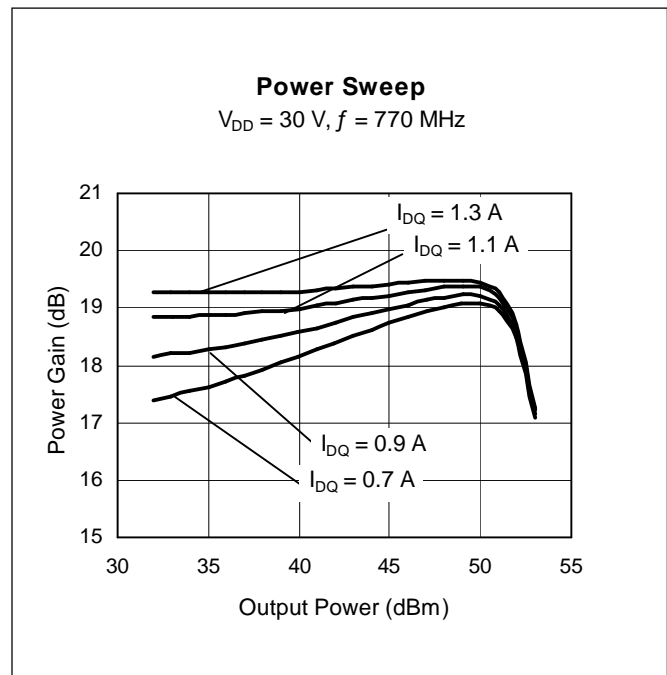
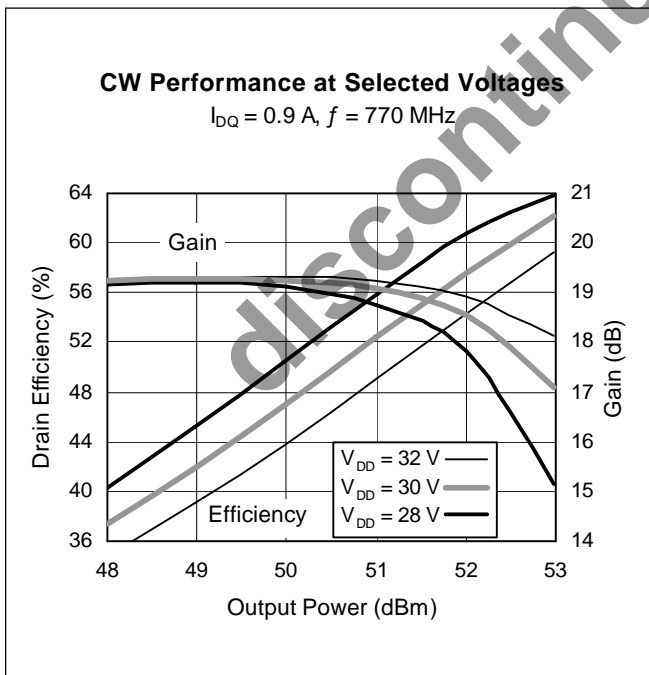
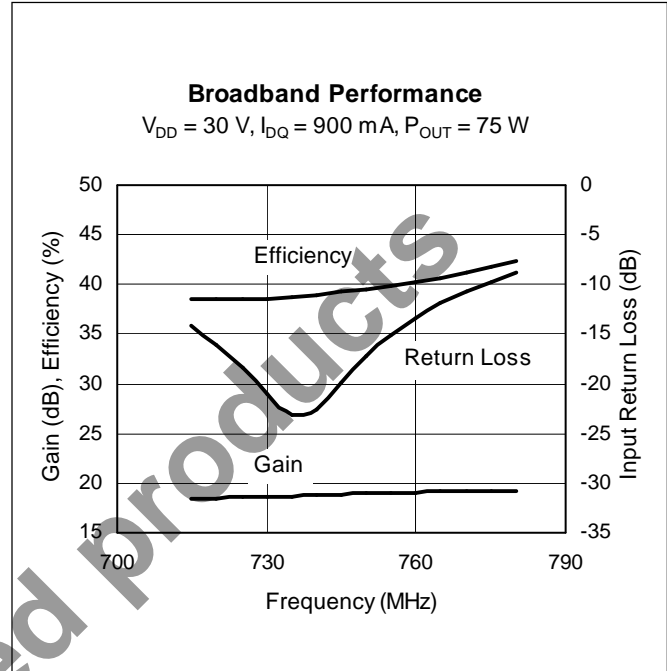
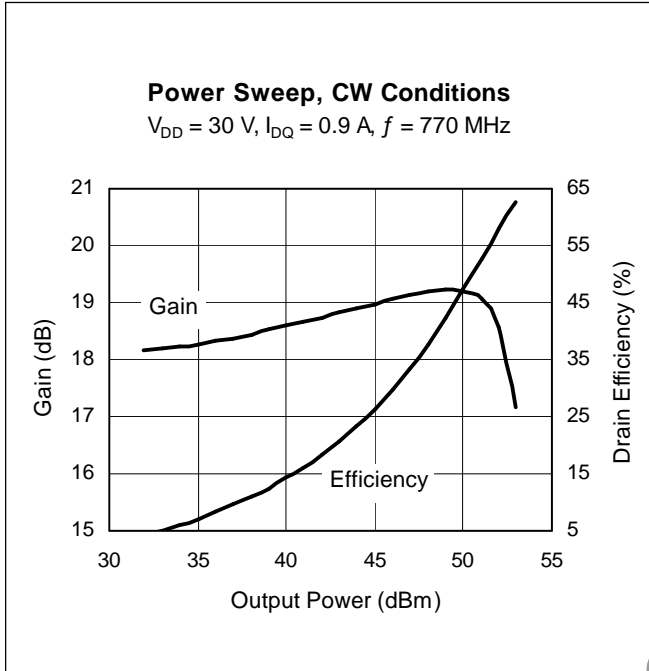
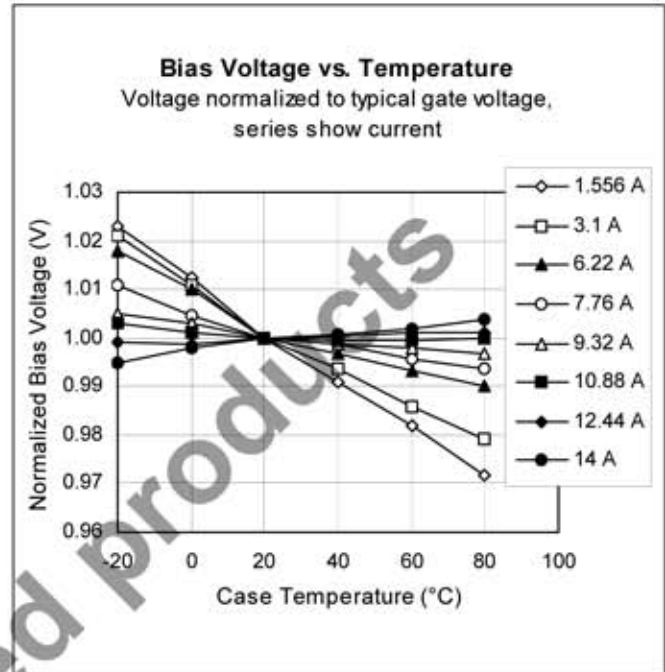
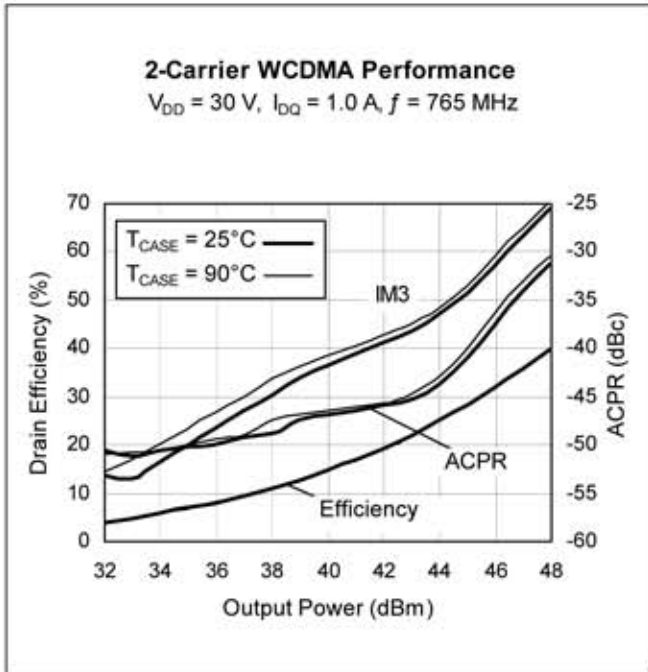


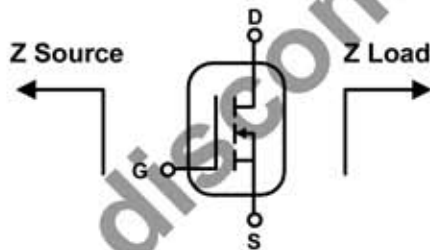
Typical Performance (data taken in a production test fixture)



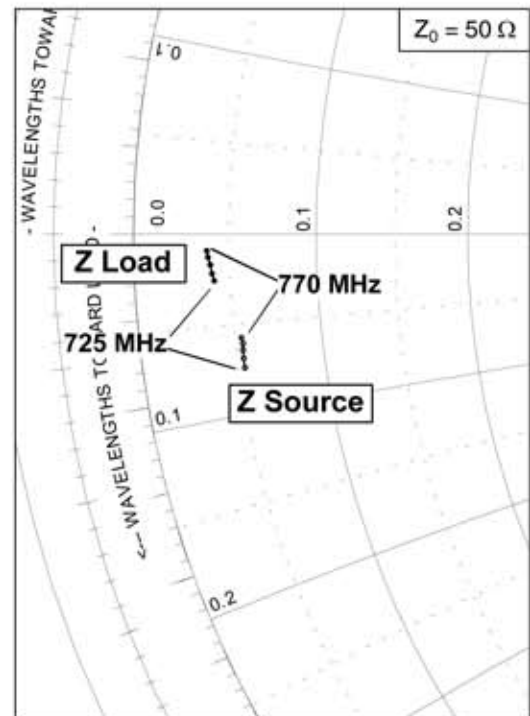
Typical Performance (cont.)



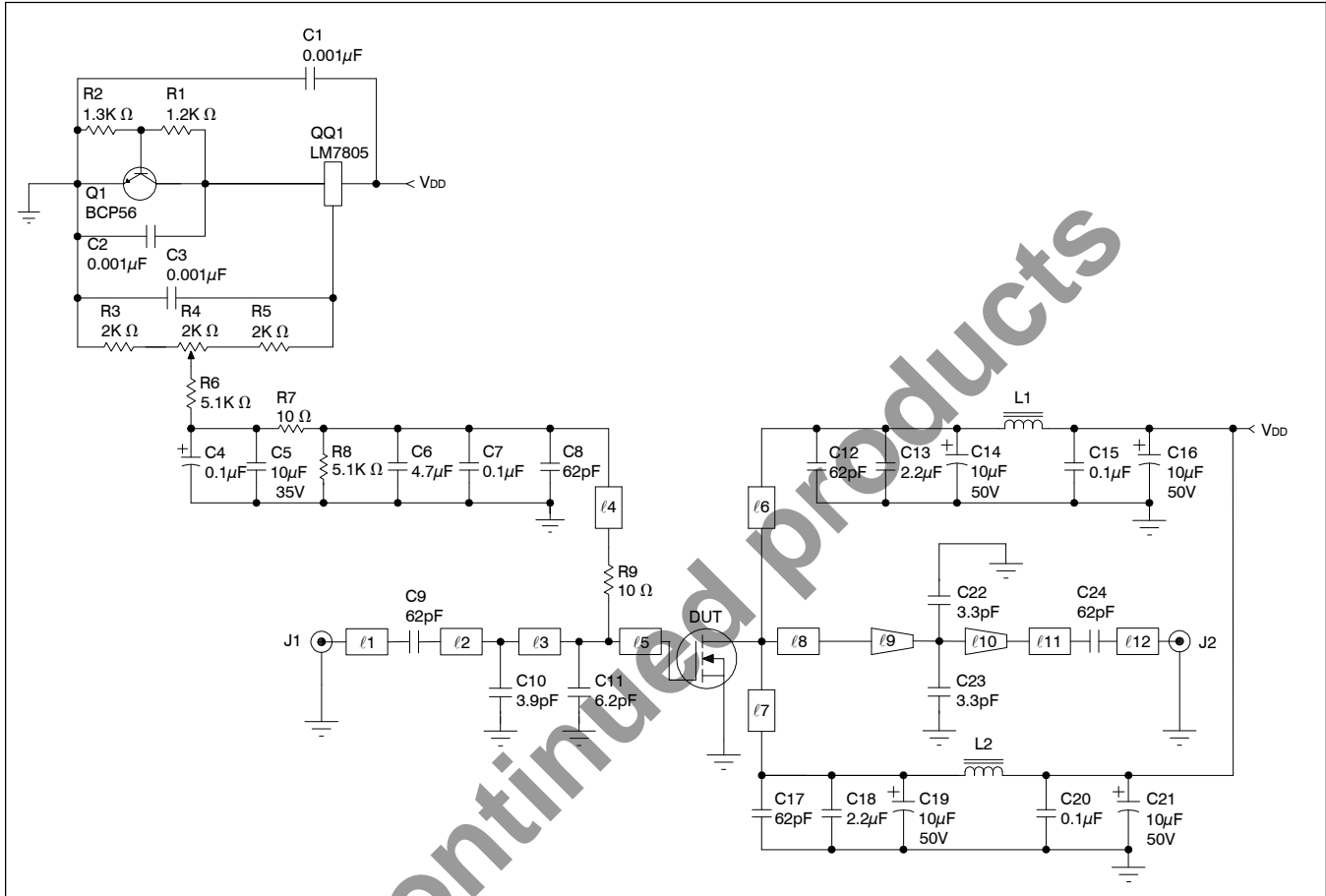
Broadband Circuit Impedance



Frequency MHz	Z Source Ω		Z Load Ω	
	R	jX	R	jX
725	2.690	-3.730	2.070	-1.27
736	2.680	-3.470	2.020	-1.08
748	2.700	-3.240	1.980	-0.84
759	2.720	-3.050	1.930	-0.64
770	2.690	-2.890	1.900	-0.46



Reference Circuit



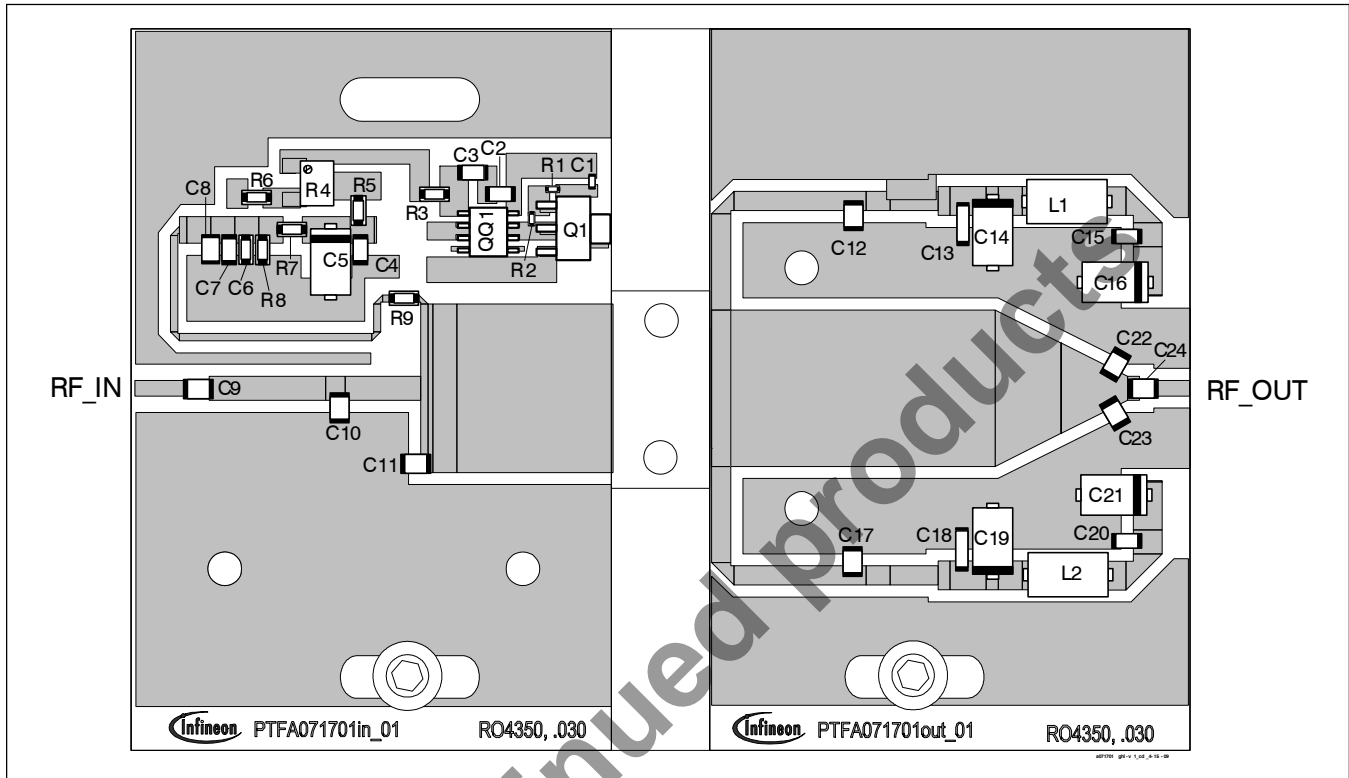
Reference circuit schematic for $f = 770 \text{ MHz}$

Circuit Assembly Information

DUT	PTFA071701E or PTFA071701F	LDMOS Transistor	
PCB	0.76 mm [.030"] thick, $\epsilon_r = 3.48$	Rogers RO4350	1 oz. copper

Microstrip	Electrical Characteristics at 770 MHz	Dimensions: L x W (mm)	Dimensions: L x W (in.)
$\ell 1$	0.025λ , 50.7Ω	5.84 x 1.65	0.230 x 0.065
$\ell 2$	0.053λ , 38.4Ω	12.32 x 2.54	0.485 x 0.100
$\ell 3$	0.035λ , 38.4Ω	8.00 x 2.54	0.315 x 0.100
$\ell 4$	0.148λ , 76.7Ω	35.94 x 0.76	1.415 x 0.030
$\ell 5$	0.094λ , 7.8Ω	20.32 x 17.78	0.800 x 0.700
$\ell 6, \ell 7$	0.103λ , 44.5Ω	24.13 x 2.03	0.950 x 0.080
$\ell 8$	0.139λ , 8.4Ω	29.97 x 16.51	1.180 x 0.650
$\ell 9$ (taper)	0.062λ , $8.4 \Omega / 33.8 \Omega$	13.46 x 16.51 / 3.05	0.530 x 0.650 / 0.120
$\ell 10$ (taper)	0.002λ , $33.8 \Omega / 38.4 \Omega$	0.51 x 3.05 / 2.54	0.020 x 0.120 / 0.100
$\ell 11$	0.005λ , 38.4Ω	1.27 x 2.54	0.050 x 0.100
$\ell 12$	0.016λ , 50.7Ω	3.76 x 1.65	0.148 x 0.065

Reference Circuit (cont.)

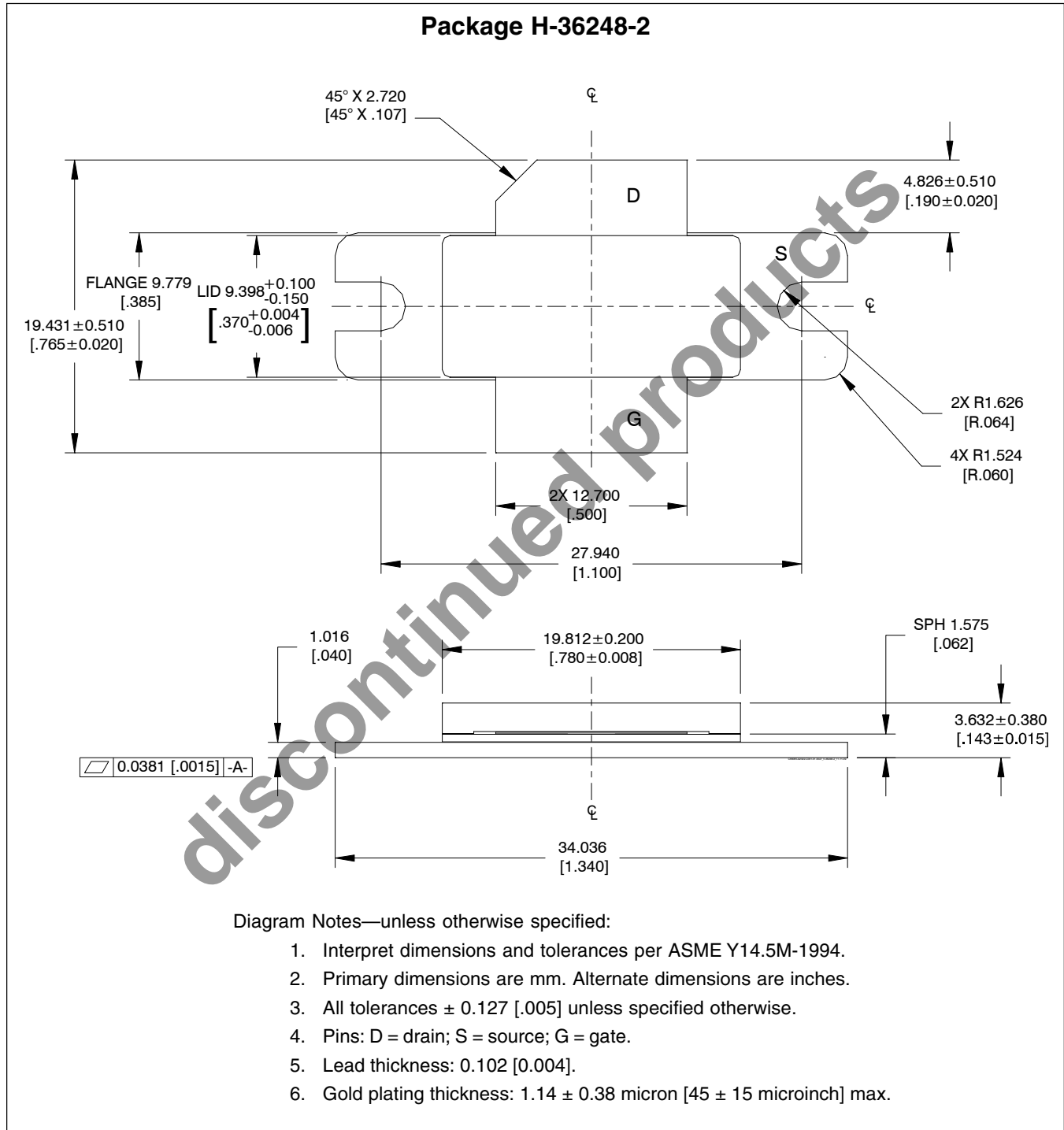


Reference circuit assembly diagram* (not to scale)

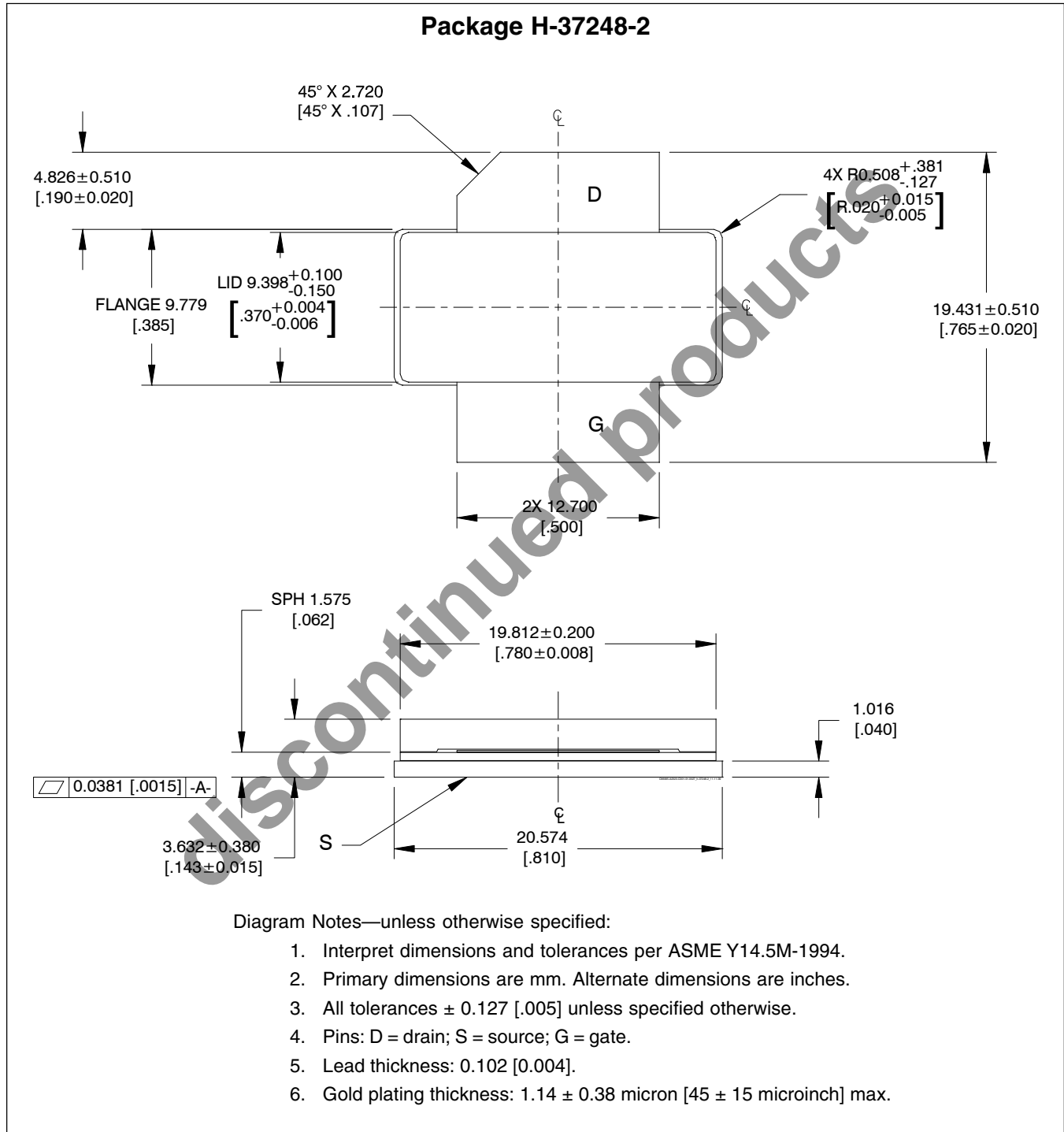
Component	Description	Suggested Manufacturer	P/N or Comment
C1, C2, C3	Capacitor, 0.001 μ F	Digi-Key	PCC1772CT-ND
C4, C7, C15, C20	Capacitor, 0.1 μ F	Digi-Key	PCC104BCT-ND
C6	Capacitor, 4.7 μ F, 16 V	Digi-Key	PCS3475CT-ND
C5	Tantalum capacitor, 10 μ F, 35 V	Digi-Key	399-1655-2-ND
C8, C9, C12, C17, C24	Ceramic capacitor, 62 pF	ATC	100B 620
C10	Ceramic capacitor, 3.9 pF	ATC	100B 3R9
C11	Ceramic capacitor, 6.2 pF	ATC	100B 7R5
C13, C18	Capacitor, 2.2 μ F	ATC	920C 202
C14, C16, C19, C21	Tantalum capacitor, 10 μ F, 50 V	Garrett Electronics	TPSE106K050R0400
C22, C23	Ceramic capacitor, 3.3 pF	ATC	100B 3R3
L1, L2	Ferrite, 8.9 mm	Elna Magnetics	BDS 4.6/3/8.9-4S2
Q1	Transistor	Infineon Technologies	BCP56
QQ1	Voltage regulator	National Semiconductor	LM7805
R1	Chip resistor, 1.2k Ω	Digi-Key	P1.2KGCT-ND
R2	Chip resistor, 1.3k Ω	Digi-Key	P1.3KGCT-ND
R3, R5	Chip resistor, 2k Ω	Digi-Key	P2KECT-ND
R4	Potentiometer, 2k Ω	Digi-Key	3224W-202ETR-ND
R6, R8	Chip resistor, 5.1k Ω	Digi-Key	P5.1KECT-ND
R7, R9	Chip resistor, 10 Ω	Digi-Key	P10ECT-ND

*Gerber files for this circuit available on request

Package Outline Specifications



Package Outline Specifications (cont.)



Find the latest and most complete information about products and packaging at the Infineon Internet page
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Previous Version: 2009-11-11, Data Sheet

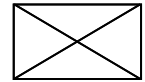
Page	Subjects (major changes since last revision)
All	Products discontinued. Please see PD notes: PD_215_14.

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Edition 20" &! "†"%

Published by

Infineon Technologies AG
81726 Munich, Germany

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