

## Maximum Ratings

Parameter	Symbol	Value	Unit	
Drain-Source Voltage	$V_{DSS}$	65	V	
Gate-Source Voltage	$V_{GS}$	-0.5 to +12	V	
Junction Temperature	$T_J$	200	°C	
Input Power	$P_{IN}$	15	dBm	
Total Device Dissipation	$P_D$	91	W	
Above 25°C derate by		0.52	W/°C	
Storage Temperature Range	$T_{STG}$	-40 to +150	°C	
Overall Thermal Resistance ( $T_{CASE} = 70^\circ\text{C}$ )	Stage 1	$R_{\theta JC}$	8.5	°C/W
$P_{OUT} = 15\text{ W}, I_{DQ1} = 70\text{ mA}, I_{DQ2} = 90\text{ mA}$	Stage 2	$R_{\theta J0C}$	2.5	°C/W

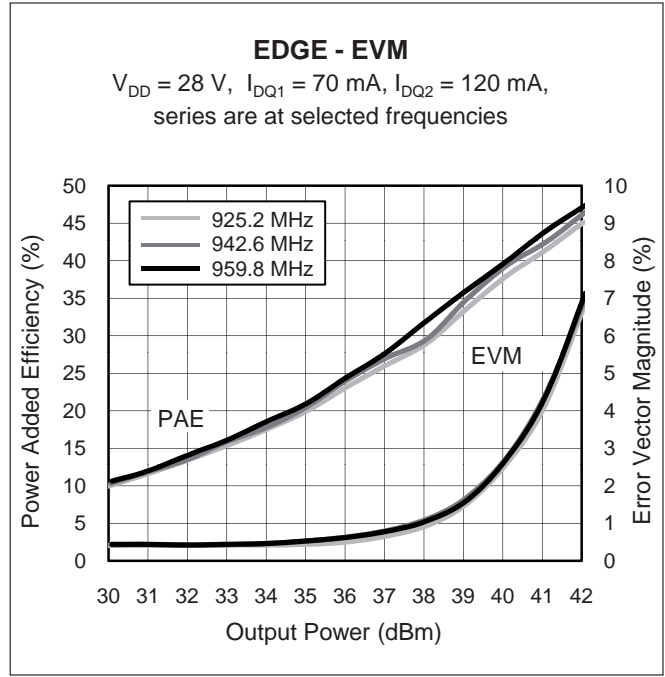
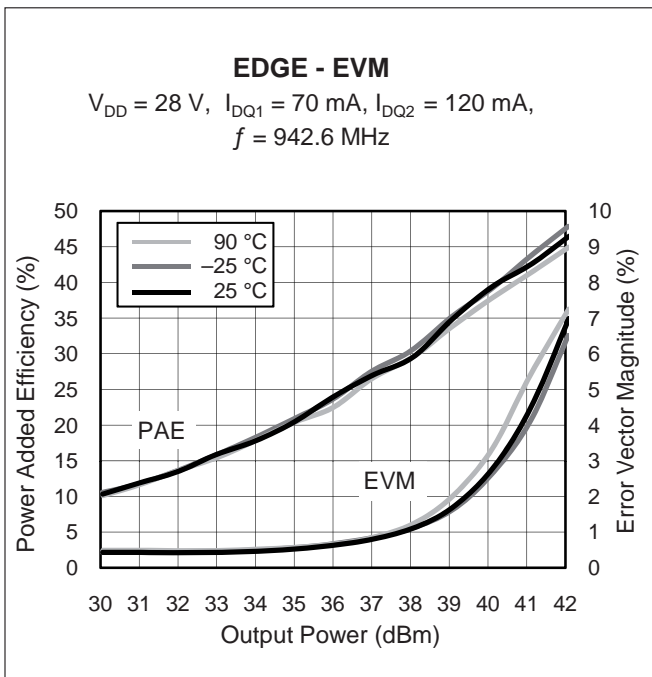
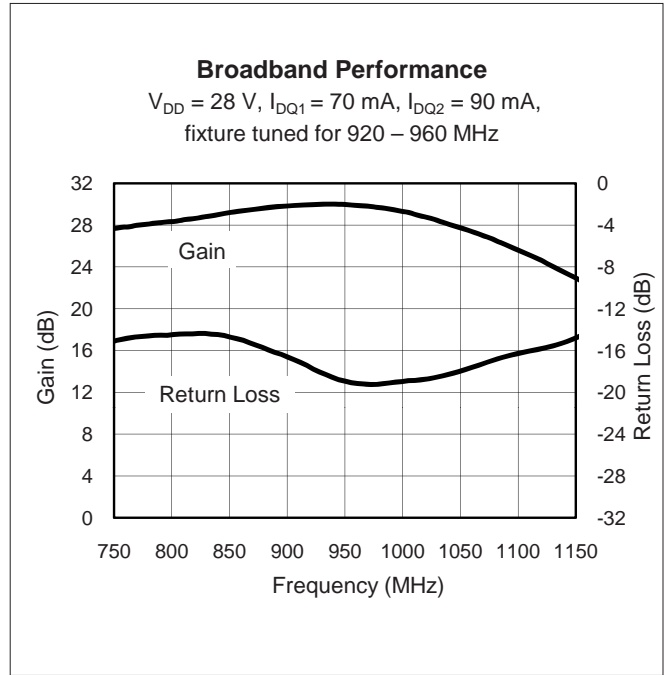
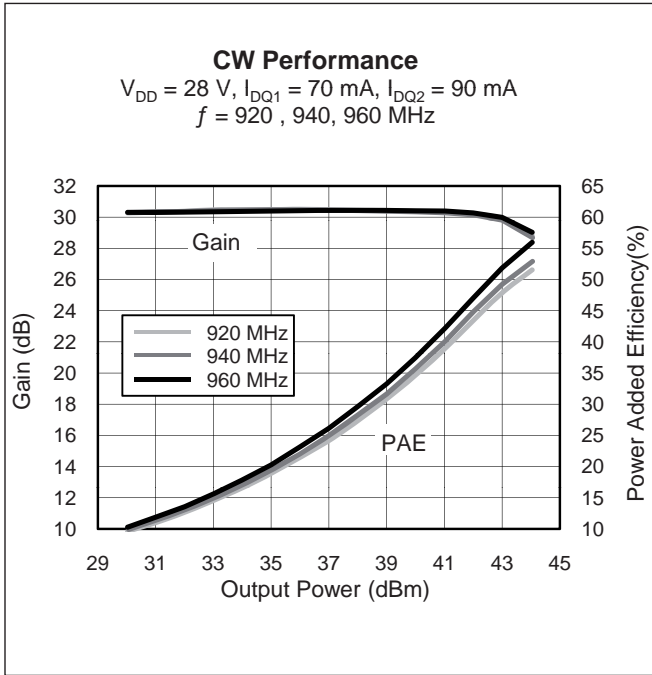
## Moisture Sensitivity Level

Level	Test Standard	Package Temperature	Unit
3	IPC/JEDEC J-STD-020	260	°C

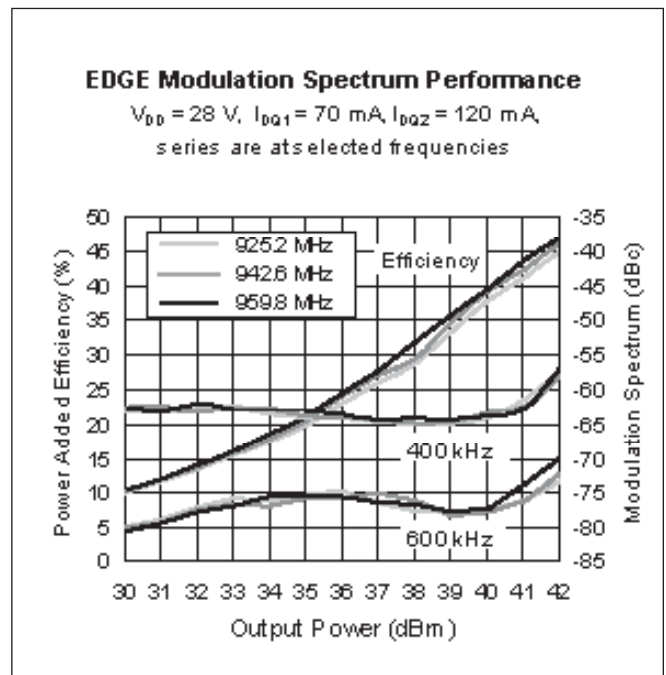
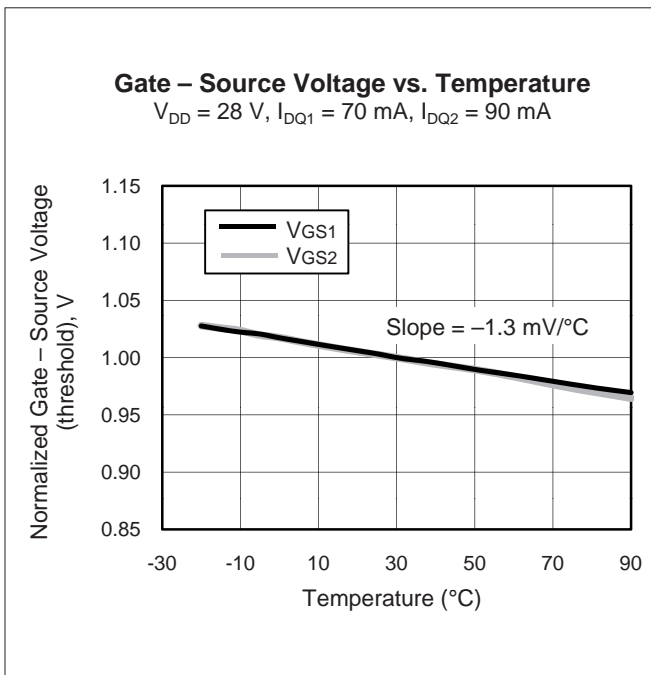
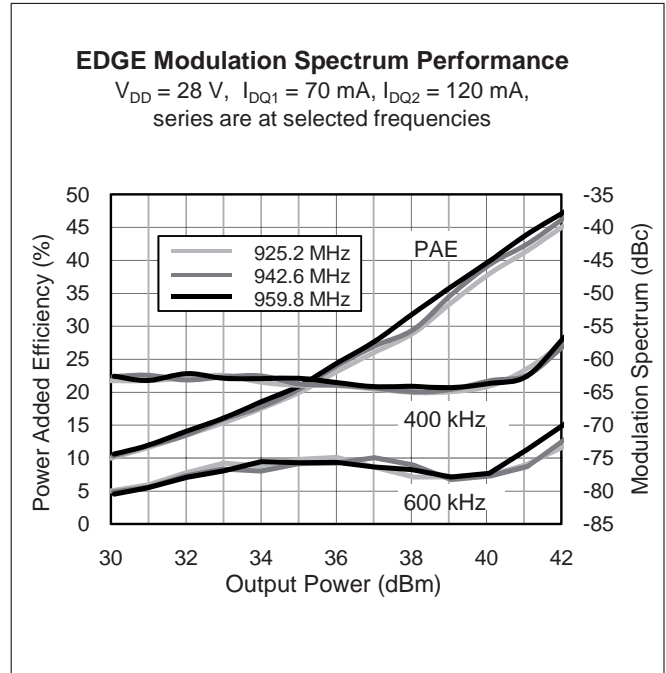
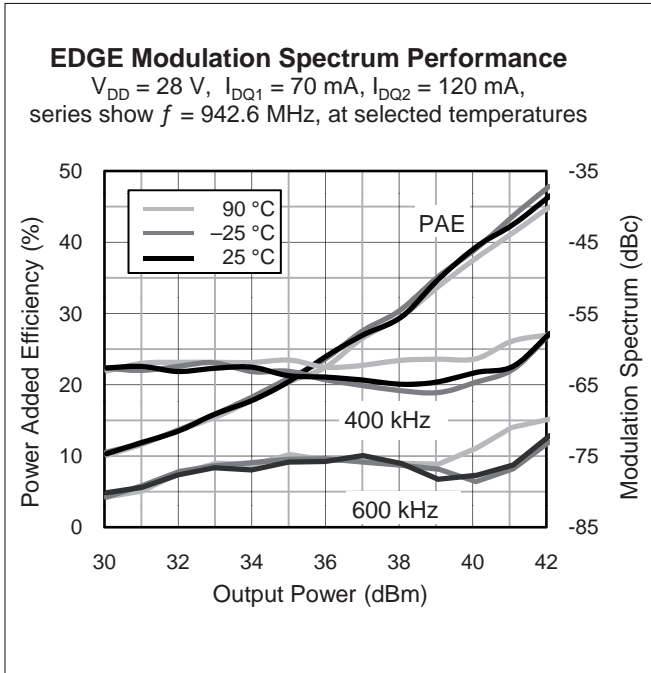
## Ordering Information

Type and Version	Order Code	Package and Description	Shipping
PTMA080152M V1	PTMA080152MV1AUMA1	PG-DSO-20-63, molded plastic	Tape & Reel, 250 pcs
PTMA080152M V1 R500	PTMA080152MV1R500AUMA1	PG-DSO-20-63, molded plastic	Tape & Reel, 500 pcs

**Typical Performance** (data taken in Infineon production test fixture)

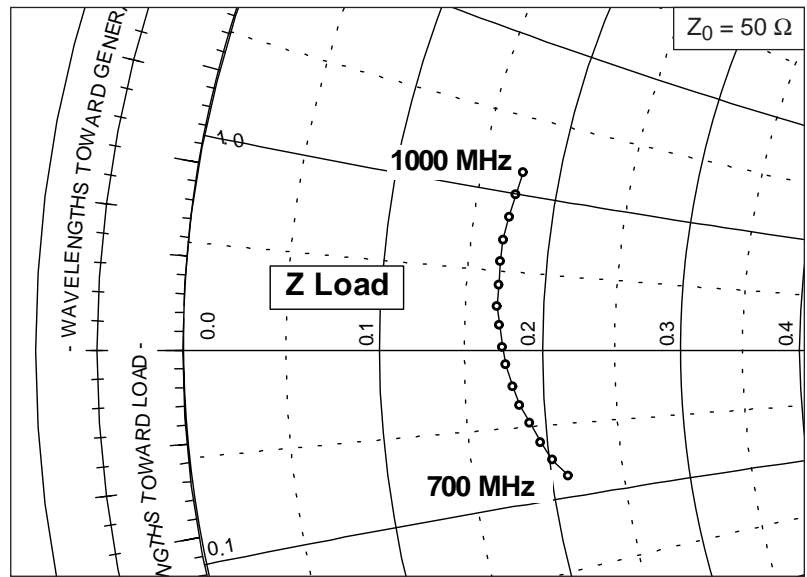
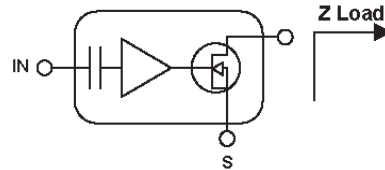


Typical Performance (cont.)

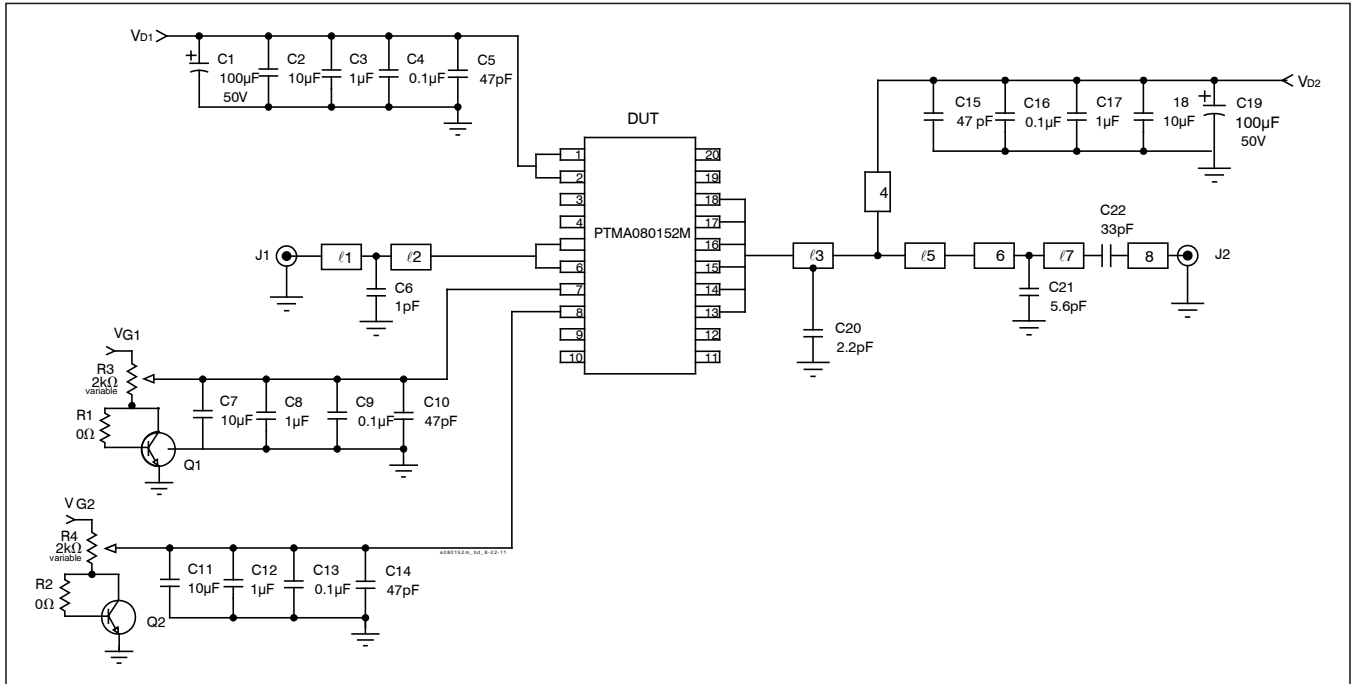


### Broadband Circuit Impedance

Frequency MHz	Z Load $\Omega$	
	R	jX
700	10.6	-4.3
720	10.1	-3.7
740	9.8	-3.1
760	9.5	-2.4
780	9.2	-1.8
800	9.0	-1.2
820	8.8	-0.5
840	8.7	0.1
860	8.6	0.8
880	8.5	1.4
900	8.5	2.1
920	8.5	2.8
940	8.5	3.5
960	8.6	4.3
980	8.7	5.0
1000	8.8	5.8



See next page for reference circuit information

**Reference Circuit**

*Reference circuit schematic for  $f = 940$  MHz*
**Circuit Assembly Information**

DUT PTMA080152M, LDMOS IC

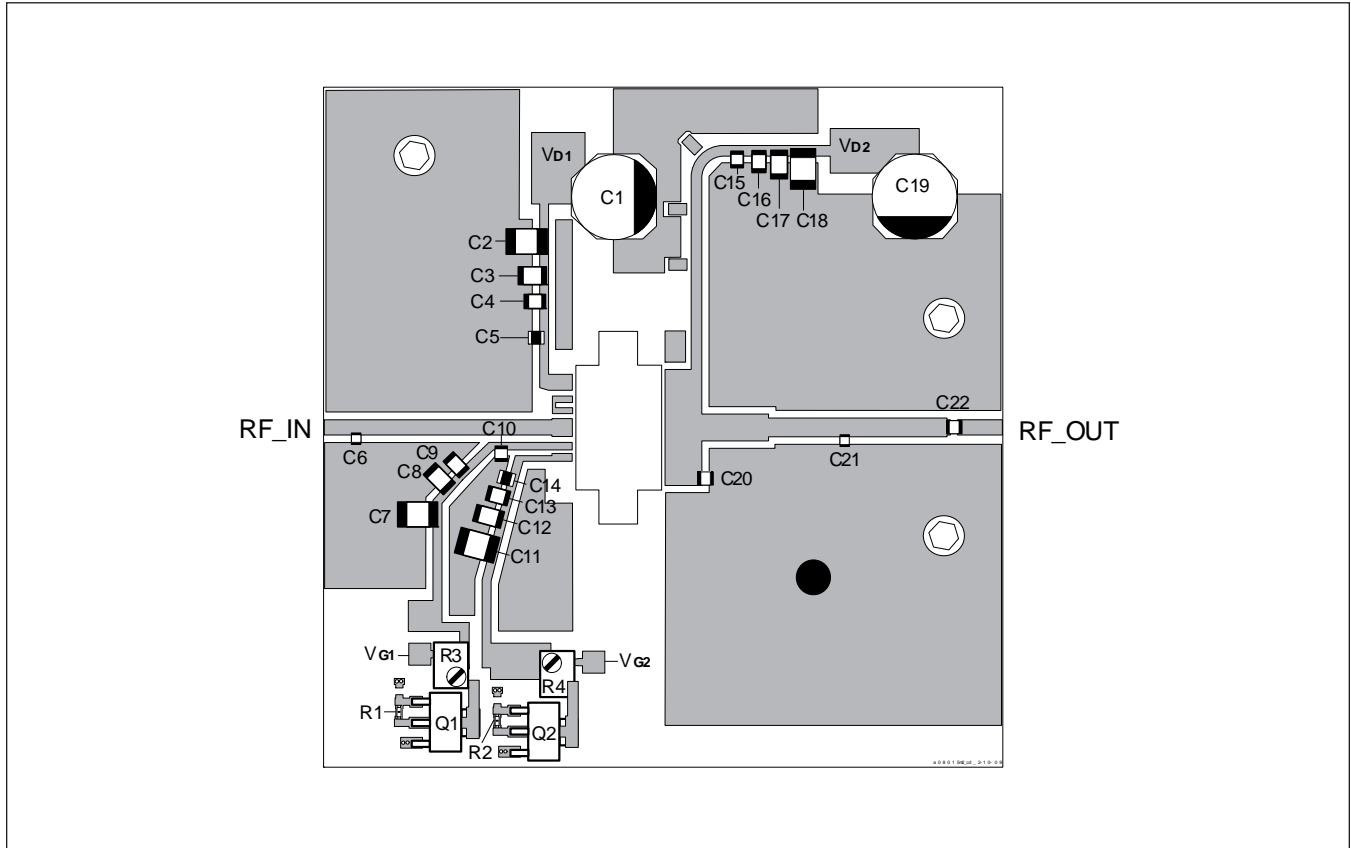
Reference Fixture Part No. LTN/PTMA080152M

 PCB 0.76 mm [.030"] thick,  $\epsilon_r = 3.48$ , Rogers RO4350, 1 oz. copper

 Find Gerber files for this reference fixture on the Infineon Web site at (<http://www.infineon.com/rfpower>)

Microstrip	Electrical Characteristics at 940 MHz	L x W (mm)	L x W (in.)
l1	0.017 $\lambda$ , 50.0 $\Omega$	3.00 x 1.70	0.118 x 0.067
l2	0.143 $\lambda$ , 50.0 $\Omega$	24.71 x 1.70	0.973 x 0.067
l3	0.024 $\lambda$ , 10.6 $\Omega$	4.09 x 12.70	0.161 x 0.500
l4	0.144 $\lambda$ , 59.0 $\Omega$	24.77 x 1.30	0.975 x 0.051
l5	0.044 $\lambda$ , 34.0 $\Omega$	7.57 x 3.02	0.298 x 0.119
l6	0.044 $\lambda$ , 44.0 $\Omega$	8.33 x 2.11	0.328 x 0.083
l7	0.0702 $\lambda$ , 44.0 $\Omega$	12.12 x 2.11	0.477 x 0.083
l8	0.030 $\lambda$ , 44.0 $\Omega$	5.18 x 2.11	0.204 x 0.083

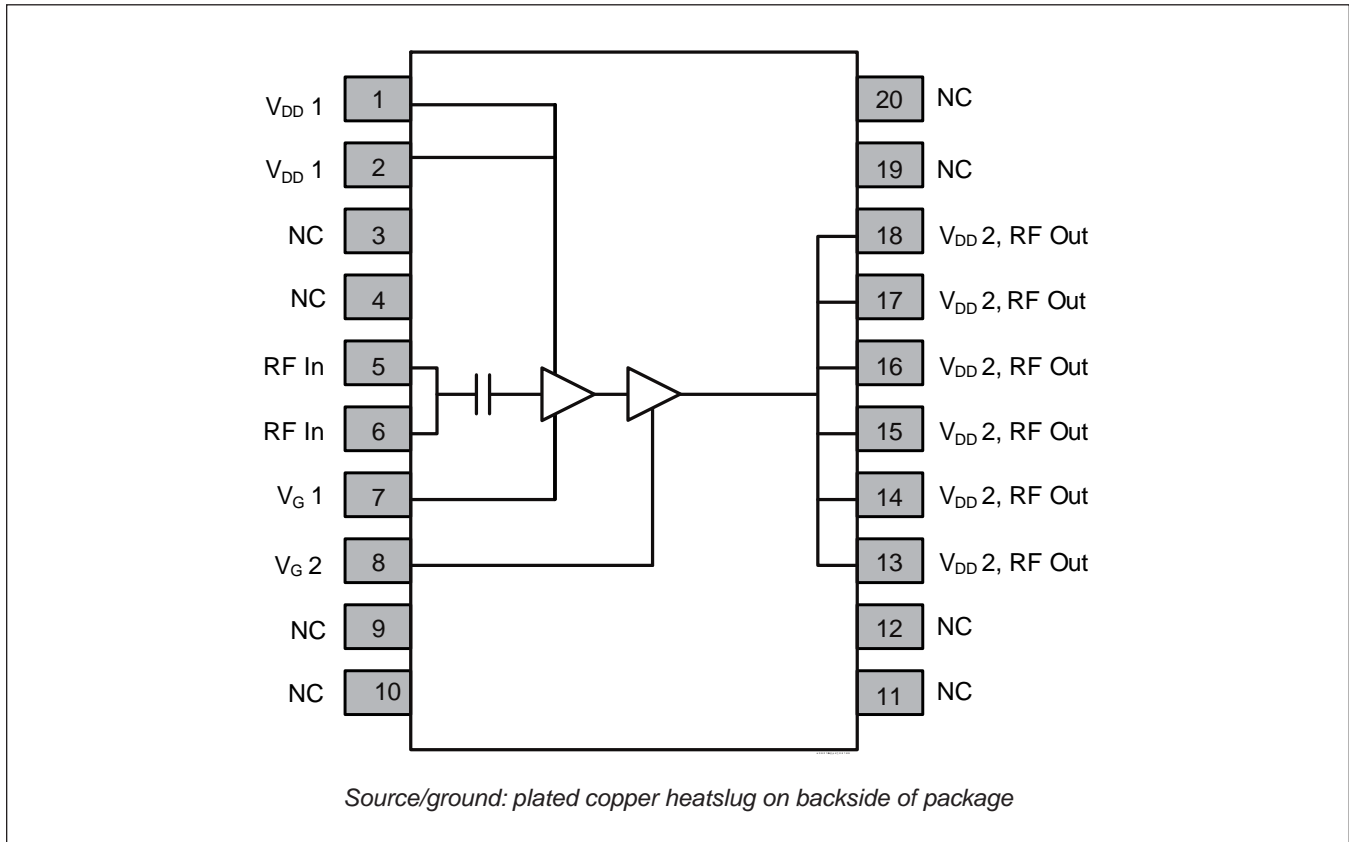
Reference Circuit (cont.)



Reference circuit assembly diagram (not to scale)

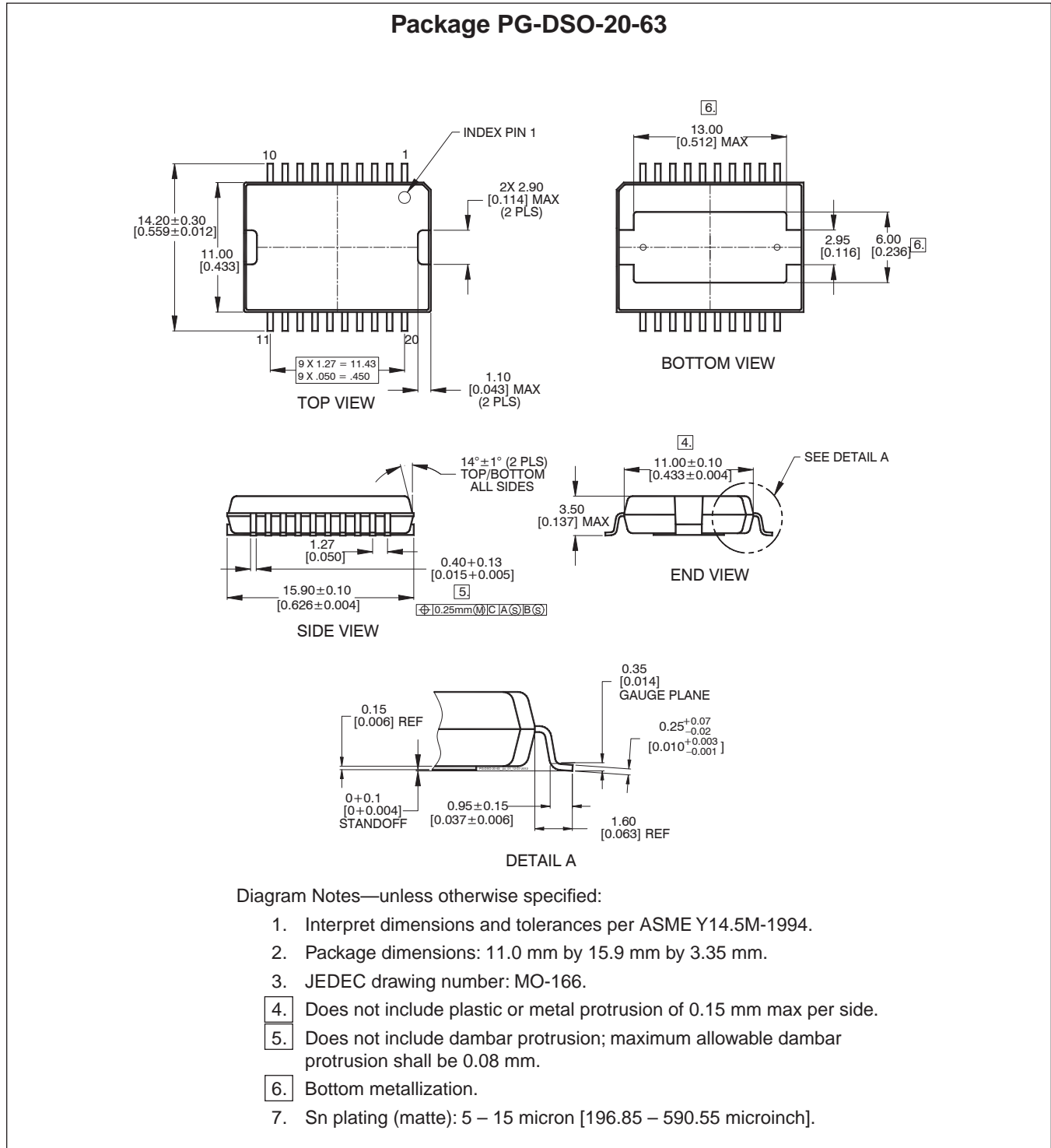
Component	Description	Suggested Manufacturer	P/N or Comment
C3, C8, C12, C17	Ceramic capacitor, 1 $\mu$ F	Digi-Key	445-1411-2-ND
C4, C9, C13, C16	Capacitor, 0.1 $\mu$ F	Digi-Key	PCC104BCT-ND
C2, C7, C11, C18	Tantalum capacitor, 10 $\mu$ F, 50 V	Digi-Key	P5571-ND
C1, C19	Electrolytic capacitor, 100 $\mu$ F, 50 V	Digi-Key	PCE3718CT-ND
C6	Ceramic capacitor, 1.0 pF	ATC	600S 1R0 CT
C20	Ceramic capacitor, 2.2 pF	ATC	600S 2R2 CT
C21	Ceramic capacitor, 5.6 pF	ATC	600S 5R6 CT
C22	Ceramic capacitor, 33 pF	ATC	600S 330 JT
C5, C10, C14, C15	Ceramic capacitor, 47 pF	ATC	600S 470 JT
Q1, Q2	Transistor	Infineon Technologies	BCP56
R1, R2	Chip resistor, 0 ohms	Digi-Key	PXXECT-ND
R3, R4	Variable resistor, 2K ohms	Digi-Key	3224W-202ETR-ND

**Pinout Diagram** (top view)



Find the latest and most complete information about products and packaging at the Infineon Internet page <http://www.infineon.com/rfpower>

Package Outline Specifications



Refer to Application Note "Recommendations for Printed Circuit Board Assembly of Infineon DSO and SSOP Packages" for additional information.



## Revision History

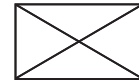
Revision	Date	Data Sheet	Page	Subjects (major changes since last revision)
01	2007-05-05	Preliminary	all	Preliminary specification for new product in development.
02	2009-02-27	Production	all	Revise package information and circuit diagrams, add impedance information.
03	2009-08-31	Production	1	Revise VSWR rating.
04	2010-04-16	Production	3; 10	Add moisture sensitivity information; update package outline notes.
05	2011-05-17	Production	2; 4	Revise DC table; remove graph.
06	2011-08-22	Production	2; all	Revise two-tone table; minor updates to graphics and diagrams for readability.
07	2014-05-07	Production	3	Add shipping option.

### We Listen to Your Comments

Any information within this document that you feel is wrong, unclear or missing at all?  
 Your feedback will help us to continuously improve the quality of this document.  
 Please send your proposal (including a reference to this document) to:

[highpowerRF@infineon.com](mailto:highpowerRF@infineon.com)

To request other information, contact us at:  
 +1 877 465 3667 (1-877-GO-LDMOS) USA  
 or +1 408 776 0600 International



### Edition 2014-05-07

Published by  
**Infineon Technologies AG**  
 85579 Neubiberg, Germany

© 2012 Infineon Technologies AG  
 All Rights Reserved.

### Legal Disclaimer

The information given in this document shall in no event be regarded as a guarantee of conditions or characteristics. With respect to any examples or hints given herein, any typical values stated herein and/or any information regarding the application of the device, Infineon Technologies hereby disclaims any and all warranties and liabilities of any kind, including without limitation, warranties of non-infringement of intellectual property rights of any third party.

### Information

For further information on technology, delivery terms and conditions and prices, please contact the nearest Infineon Technologies Office ([www.infineon.com/rfpower](http://www.infineon.com/rfpower)).

### Warnings

Due to technical requirements, components may contain dangerous substances. For information on the types in question, please contact the nearest Infineon Technologies Office.

Infineon Technologies components may be used in life-support devices or systems only with the express written approval of Infineon Technologies, if a failure of such components can reasonably be expected to cause the failure of that life-support device or system or to affect the safety or effectiveness of that device or system. Life support devices or systems are intended to be implanted in the human body or to support and/or maintain and sustain and/or protect human life. If they fail, it is reasonable to assume that the health of the user or other persons may be endangered.

单击下面可查看定价，库存，交付和生命周期等信息

[>>Infineon\(英飞凌\)](#)