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5 March 2022

Richardson RFPD, Inc.
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Geneva, Illinois 60134

ATTN: Quality/Purchasing Manager

Subject: MAUC-011003 Datasheet Change

PCN #: PCN-01512

Dear Valued Customer:

The goal of MACOM Technology Solutions is to continually deliver high quality products and services that meet our customers' needs. We strive to offer products that are industry leading in terms of performance, delivery, safety and value.

In accordance with these goals, this communication is to inform you that MACOM is making a change to the following product's datasheet.

MAUC-011003-000000
MAUC-011003-TR0500

As a yield improvement measure, the MAX Gain at 30GHz is being changed from 14 to 14.5dB.

There are no other changes to design, form, fit, function, or reliability associated with this change.

Please contact your local sales representative if you have any questions or require additional information.

Sincerely,

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MAUC-011003 Current Rev V2 Datasheet

Up Converter
27.5 - 33.4 GHz

Rev. V2

**Electrical Specifications: LO = 0 dBm, IF = -10 dBm @ 2 GHz,
 $V_{D1,2} = 4$ V, $V_{D3} = 3$ V, $I_{D1} + I_{D2} = 240$ mA, $I_{D3} = 140$ mA, $V_{G4} = -3$ V, $T_A = 25^\circ\text{C}$**

Parameter	Units	Min.	Typ.	Max.
Frequency Range (RF)	GHz	27.5	-	33.4
Frequency Range (LO)	GHz	12	-	18.45
LO Input Power (PLO)	dBm	-	0	-
Conversion Gain	dB	8.5	12.0	14.0
Image Rejection	dBc	-	15	-
Input IP3	dBm	-	20	-
Output IP3 ($P_{IN} = -10$ dBm/tone)	dBm	28	32	-
Spurious (2xLO) [tuned - IF voltages ~ 0.2 V]	dBm	-	-45	-
Spurious (1xLO)	dBm	-	-55	-
Gate Voltages (V_{G1}, V_{G2}, V_{G3}) ⁴	V	-1.0	-	-0.1
Gate Current ($I_{G1} + I_{G2}$)	mA	-2.0	-	0
Gate Current (I_{G3})	mA	-0.5	-	0

4. Apply gate voltages prior to drain voltages. First turn on $V_{G4} = -3$ V. Then adjust V_{G1} , V_{G2} and V_{G3} between -1.0 and -0.1 V to achieve specified drain current. Typical current (380 mA) = 240 ($I_{D1} + I_{D2}$) + 140 (I_{D3}). Refer to App Note [1] for biasing details.

MAUC-011003 New Rev V3 Datasheet

MAUC-011003

Rev. V3

**Electrical Specifications: LO = 0 dBm, IF = -10 dBm @ 2 GHz,
V_{D1,2}⁴ = 4 V, V_{D3}⁴ = 3 V, I_{D1} + I_{D2} = 240 mA, I_{D3} = 140 mA, V_{G4} = -3 V, T_A = 25°C**

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Frequency Range	RF LO	GHz	27.5 12.0	—	33.4 18.45
LO Input Power	PLO	dBm	—	0	—
Conversion Gain	27.5 - 29.0 GHz 29.0 - 33.4 GHz	dB	8.5 8.5	12.0 12.0	14.0 14.5
Image Rejection	—	dBc	—	15	—
Input IP3	—	dBm	—	20	—
Output IP3	P _{IN} = -10 dBm/tone	dBm	28	32	—
Spurious	(2xLO) [tuned - IF voltages ~ 0.2 V] (1xLO)	dBm	—	-45 -55	—
Gate Voltages	(V _{G1} , V _{G2} , V _{G3}) ⁴	V	-1.0	—	-0.1
Gate Current	(I _{G1} + I _{G2}) (I _{G3})	mA	-2.0 -0.5	—	0

4. Apply gate voltages prior to drain voltages. First turn on V_{G4} = -3 V. Then adjust V_{G1}, V_{G2} and V_{G3} between -1.0 and -0.1 V to achieve specified drain current. Typical current (380 mA) = 240 (I_{D1} + I_{D2}) + 140 (I_{D3}). Refer to App Note [1] for biasing details.