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20 July 2021

Richardson RFPD, Inc.
1950 S. Batavia Ave, Suite 100
Geneva, Illinois 60134

ATTN: Quality/Purchasing Manager

Subject: MAAD-011021-000DIE/-0GPDIE Datasheet Change

PCN #: PCN-01453

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.

MAAD-011021-000DIE
MAAD-011021-0GPDIE

The minimum Attenuation Bit 3:2dB is changing from 1.7 dB to 1.6dB. The typical value is also changing from 1.8 dB to 1.75 dB to more accurately reflect part operation. 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,

Alan Miller
Product Marketing Manager
MACOM
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MAAD-011021-DIE Current Rev V3 Datasheet

Digital Attenuator, 6-Bit, 0.5 dB LSB step
DC - 40 GHz

Rev. V3

Electrical Specifications: $T_A = +25^\circ\text{C}$, $V_{CC} = -5\text{ V}$, $Z_0 = 50\ \Omega$ (unless otherwise specified)

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Insertion Loss	DC - 20 GHz 20 - 40 GHz 10 GHz 20 GHz 30 GHz	dB	—	6.4 8.8 6.0 7.0 8.0	— — 7.0 8.0 9.0
Return Loss	DC - 40 GHz	dB	—	15	—
Attenuation Bits	20 GHz LSB: 0.5 dB Bit 2: 1 dB Bit 3: 2 dB Bit 4: 4 dB Bit 5: 8 dB Bit 6: 16 dB	dB	0.3 0.7 1.7 3.6 7.0 16.0	0.4 0.9 1.8 3.8 8.0 17.4	0.5 1.0 1.9 4.0 9.0 19.0
Attenuation Error RMS	DC - 20 GHz 20 - 40 GHz	dB	—	0.3 1.2	—
Phase Error RMS	DC - 20 GHz 20 - 40 GHz	deg	—	2.6 7.2	—
Input P0.1dB	DC - 40 GHz	dBm	—	24	—
Input IP3	DC - 40 GHz	dBm	—	38	—
Switching Time	DC - 40 GHz	ns	—	45	—
Control Logic	DC - 40 GHz	V	—	0/+5	—
Control Current	each control bit @ +5 V	mA	—	6	—
Supply Current	DC - 40 GHz	mA	—	17	45

MAAD-011021-DIE New Rev V4 Datasheet

Digital Attenuator, 6-Bit, 0.5 dB LSB step
DC - 40 GHz

Rev. **V4**

Electrical Specifications: $T_A = +25^\circ\text{C}$, $V_{CC} = -5\text{ V}$, $Z_0 = 50\ \Omega$ (unless otherwise specified)

Parameter	Test Conditions	Units	Min.	Typ.	Max.
Insertion Loss	DC - 20 GHz	dB	—	6.4	—
	20 - 40 GHz			8.8	—
	10 GHz			6.0	7.0
	20 GHz			7.0	8.0
	30 GHz			8.0	9.0
Return Loss	DC - 40 GHz	dB	—	15	—
Attenuation Bits	20 GHz	dB	0.3 0.7 1.6 3.6 7.0 16.0	0.4 0.9 1.75 3.8 8.0 17.4	0.5 1.0 1.9 4.0 9.0 19.0
	LSB: 0.5 dB				
	Bit 2: 1 dB				
	Bit 3: 2 dB				
	Bit 4: 4 dB				
	Bit 5: 8 dB				
	Bit 6: 16 dB				
Attenuation Error RMS	DC - 20 GHz	dB	—	0.3	—
	20 - 40 GHz			1.2	
Phase Error RMS	DC - 20 GHz	deg	—	2.6	—
	20 - 40 GHz			7.2	
Input P0.1dB	DC - 40 GHz	dBm	—	24	—
Input IP3	DC - 40 GHz	dBm	—	38	—
Switching Time	DC - 40 GHz	ns	—	45	—
Control Logic	DC - 40 GHz	V	—	0/+5	—
Control Current	each control bit @ +5 V	mA	—	6	—
Supply Current	DC - 40 GHz	mA	—	17	45