RoHS

COMPLIANT HALOGEN

FREE

**Vishay Semiconductors** 

# RF PIN Diodes - Single in DO-35 (DO-204AH)



www.vishay.com

## DESIGN SUPPORT TOOLS click logo to get started



## MECHANICAL DATA

Case: DO-35 (DO-204AH)

Weight: approx. 125 mg Cathode band color: black

Packaging codes/options:

## Packaging codes/options:

TR/10K per 13" reel (52 mm tape), 50K/box TAP/10K per ammopack (52 mm tape), 50K/box

PARTS TABLE						
PART	TYPE DIFFERENTIATION	ORDERING CODE	TYPE MARKING	CIRCUIT CONFIGURATION	REMARKS	
BA479G	$V_R$ = 30 V, $z_r$ > 5 k $\Omega$	BA479G-TR or BA479G-TAP	BA479G	Single	Tape and reel/ammopack	
BA479S	$V_R$ = 30 V, $z_r$ > 9 k $\Omega$	BA479S-TR or BA479S-TAP	BA479S	Single	Tape and reel/ammopack	

<b>ABSOLUTE MAXIMUM RATINGS</b> (T <sub>amb</sub> = 25 °C, unless otherwise specified)						
PART	TEST CONDITION	SYMBOL	VALUE	UNIT		
Reverse voltage		V <sub>R</sub>	30	V		
Forward continuous current		I <sub>F</sub>	50	mA		

<b>THERMAL CHARACTERISTICS</b> (T <sub>amb</sub> = 25 °C, unless otherwise specified)						
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT		
Thermal resistance junction to ambient air	$I = 4 \text{ mm}, T_L = \text{constant}$	R <sub>thJA</sub>	350	K/W		
Junction temperature		Тj	125	°C		
Storage temperature range		T <sub>stg</sub>	-55 to +150	°C		

<b>ELECTRICAL CHARACTERISTICS</b> ( $T_{amb}$ = 25 °C, unless otherwise specified)							
PARAMETER	TEST CONDITION	PART	SYMBOL	MIN.	TYP.	MAX.	UNIT
Forward voltage	I <sub>F</sub> = 20 mA		V <sub>F</sub>			1	V
Reverse current	V <sub>R</sub> = 30 V		I <sub>R</sub>			0.05	μA
Diode capacitance	$f = 100 \text{ MHz}, \text{ V}_{\text{R}} = 0 \text{ V}$		CD			0.5	pF
Differential forward resistance	f = 100 MHz, I <sub>F</sub> = 1.5 mA		r <sub>f</sub>			50	Ω
Povorso impodanco	$f = 100 \text{ MHz}, \text{ V}_{\text{R}} = 0 \text{ V}$	BA479G	Zr	5			kΩ
neverse impedance		BA479S	Zr	9			kΩ
Minority carrier lifetime	l <sub>F</sub> = 10 mA, l <sub>R</sub> = 10 mA		τ		4		μs

Rev. 1.9, 27-Apr-17

1

Document Number: 85527

For technical questions within your region: <u>DiodesAmericas@vishay.com</u>, <u>DiodesAsia@vishay.com</u>, <u>DiodesEurope@vishay.com</u> THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT <u>www.vishay.com/doc?91000</u>

#### FEATURES

- Wide frequency range 10 MHz to 1 GHz
- AEC-Q101 qualified
- Material categorization: for definitions of compliance please see <u>www.vishay.com/doc?99912</u>

## APPLICATIONS

 Current controlled HF resistance in adjustable attenuators



## **Vishay Semiconductors**

## TYPICAL CHARACTERISTICS (T<sub>amb</sub> = 25 °C, unless otherwise specified)



Fig. 1 - Forward Current vs. Forward Voltage



Fig. 2 - Differential Forward Resistance vs. Forward Current

## PACKAGE DIMENSIONS in millimeters (inches): DO-35 (DO-204AH)



Rev. 1.9, 27-Apr-17

2

Document Number: 85527

For technical questions within your region: <u>DiodesAmericas@vishay.com</u>, <u>DiodesAsia@vishay.com</u>, <u>DiodesEurope@vishay.com</u> THIS DOCUMENT IS SUBJECT TO CHANGE WITHOUT NOTICE. THE PRODUCTS DESCRIBED HEREIN AND THIS DOCUMENT ARE SUBJECT TO SPECIFIC DISCLAIMERS, SET FORTH AT <u>www.vishay.com/doc?91000</u>



Fig. 3 - Typ. Cross Modulation Distortion vs. Frequency f2



Vishay

## Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, "Vishay"), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.

# **X-ON Electronics**

Largest Supplier of Electrical and Electronic Components

Click to view similar products for PIN Diodes category:

Click to view products by Vishay manufacturer:

Other Similar products are found below :

MA45471 MA4SPS502 APD2220-000 APD0810-000 MA4FCP200 MA4GP907 MA4L032-186 MA4L401-30 MA4P606-258 MA4P7435NM-1091T MA4PK2000 MA4PK2001 MA4PK2004 MADP-007167-12250T MADP-030025-13140P BAR 64-02V H6327 MA4PBL027 MA4AGFCP910 MA4P7101F-1072T MA4L022-30 MA47047-54 CLA4610-000 BAR 89-02LRH E6327 UM7108B UM9701 ISV308,L3F UM9301SM GC4723-42 MA4L011-1088 MSW2001-200 SMP1321-000 UM4010SM UM6002B UM7006A UM7006B UM7108C GC4742-42 MADP-000015-000030 MGPN1503-C01A LXP1000-23-2 LXP1004-23-2 LXP1004-23-0 MPP4202-206 MPP4205-206 SMP1321-011LF MA4L021-1056 MSW2031-203 MLP7120-11 MSWSE-050-10 MADR-009150-TR1000