RoHS

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Vishay Semiconductors

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



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MECHANICAL DATA

Case: DO-35 (DO-204AH)

Weight: approx. 125 mg

Cathode band color: black

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 Ω	BA479G-TR or BA479G-TAP	BA479G	Single	Tape and reel/ammopack		
BA479S	V_R = 30 V, z_r > 9 k Ω	BA479S-TR or BA479S-TAP	BA479S	Single	Tape and reel/ammopack		

ABSOLUTE MAXIMUM RATINGS (T _{amb} = 25 °C, unless otherwise specified)						
PART	TEST CONDITION	SYMBOL	VALUE	UNIT		
Reverse voltage		V _R	30	V		
Forward continuous current		١ _F	50	mA		

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

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

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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



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TYPICAL CHARACTERISTICS (T_{amb} = 25 °C, unless otherwise specified)

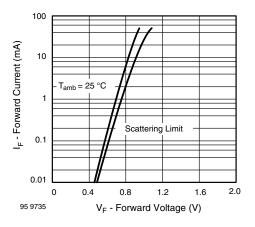


Fig. 1 - Forward Current vs. Forward Voltage

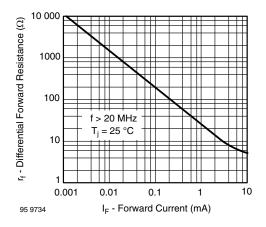
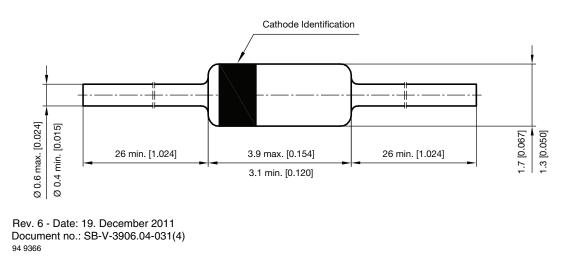


Fig. 2 - Differential Forward Resistance vs. Forward Current

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



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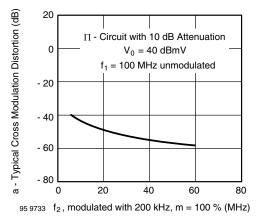


Fig. 3 - Typ. Cross Modulation Distortion vs. Frequency f2



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