

RF PIN Diodes - Single in DO-35



FEATURES

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



RoHS
COMPLIANT
HALOGEN
FREE

APPLICATIONS

- Current controlled HF resistance in adjustable attenuators

MECHANICAL DATA

Case: DO-35

Weight: approx. 125 mg

Cathode band color: black

Packaging codes/options:

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

TAP/10K per ammpack (52 mm tape), 50K/box

PARTS TABLE

PART	TYPE DIFFERENTIATION	ORDERING CODE	TYPE MARKING	INTERNAL CONSTRUCTION	REMARKS
BA479G	$V_R = 30\text{ V}$, $z_r > 5\text{ k}\Omega$	BA479G-TR or BA479G-TAP	BA479G	Single diode	Tape and reel/ammpack
BA479S	$V_R = 30\text{ V}$, $z_r > 9\text{ k}\Omega$	BA479S-TR or BA479S-TAP	BA479S	Single diode	Tape and reel/ammpack

ABSOLUTE MAXIMUM RATINGS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)

PART	TEST CONDITION	SYMBOL	VALUE	UNIT
Reverse voltage		V_R	30	V
Forward continuous current		I_F	50	mA

THERMAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)

PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Thermal resistance junction to ambient air	$l = 4\text{ mm}$, $T_L = \text{constant}$	R_{thJA}	350	K/W
Junction temperature		T_j	125	$^{\circ}\text{C}$
Storage temperature range		T_{stg}	- 55 to + 150	$^{\circ}\text{C}$

ELECTRICAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)

PARAMETER	TEST CONDITION	PART	SYMBOL	MIN.	TYP.	MAX.	UNIT
Forward voltage	$I_F = 20\text{ mA}$		V_F			1	V
Reverse current	$V_R = 30\text{ V}$		I_R			0.05	μA
Diode capacitance	$f = 100\text{ MHz}$, $V_R = 0\text{ V}$		C_D			0.5	pF
Differential forward resistance	$f = 100\text{ MHz}$, $I_F = 1.5\text{ mA}$		r_f			50	Ω
Reverse impedance	$f = 100\text{ MHz}$, $V_R = 0\text{ V}$	BA479G	z_r	5			$\text{k}\Omega$
		BA479S	z_r	9			$\text{k}\Omega$
Minority carrier lifetime	$I_F = 10\text{ mA}$, $I_R = 10\text{ mA}$		τ		4		μs

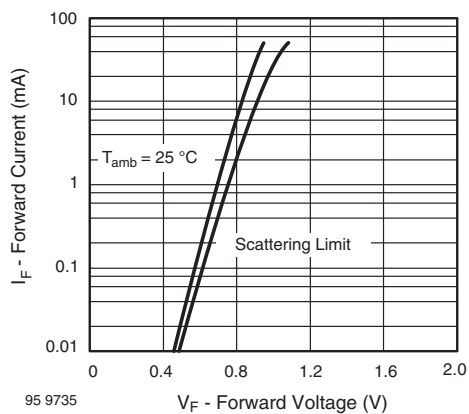
TYPICAL CHARACTERISTICS ($T_{amb} = 25\text{ }^{\circ}\text{C}$, unless otherwise specified)


Fig. 1 - Forward Current vs. Forward Voltage

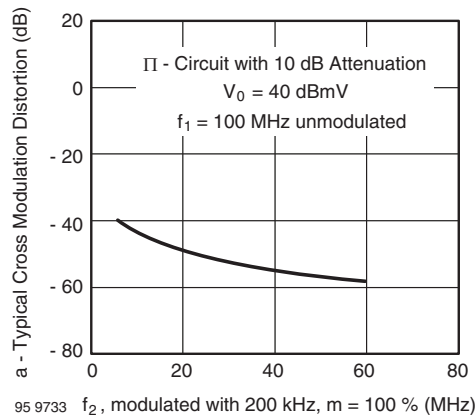
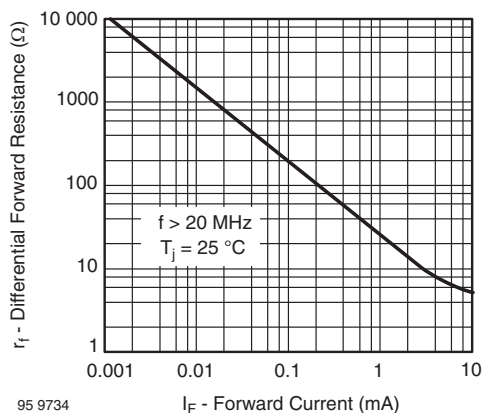
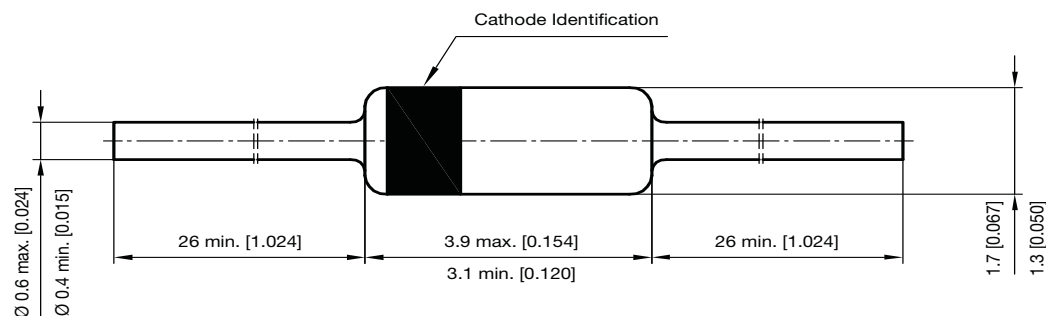

Fig. 3 - Typ. Cross Modulation Distortion vs. Frequency f_2


Fig. 2 - Differential Forward Resistance vs. Forward Current

PACKAGE DIMENSIONS in millimeters (inches): **DO-35**


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