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 ammopack (52 mm tape), 50K/box

PARTS TABLE

PART	TYPE DIFFERENTIATION	ORDERING CODE	TYPE MARKING	INTERNAL CONSTRUCTION	REMARKS
BA479G	V_R = 30 V, z_r > 5 kΩ	BA479G-TR or BA479G-TAP	BA479G	Single diode	Tape and reel/ammopack
BA479S	V_R = 30 V, z_r > 9 kΩ	BA479S-TR or BA479S-TAP	BA479S	Single diode	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		I_F	50	mA

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

PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Thermal resistance junction to ambient air	l = 4 mm, T_L = constant	R_{thJA}	350	K/W
Junction temperature		T_j	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 MHz, V_R = 0 V		C_D			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	z_r	5			kΩ
		BA479S	z_r	9			kΩ
Minority carrier lifetime	I_F = 10 mA, I_R = 10 mA		τ		4		µs

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

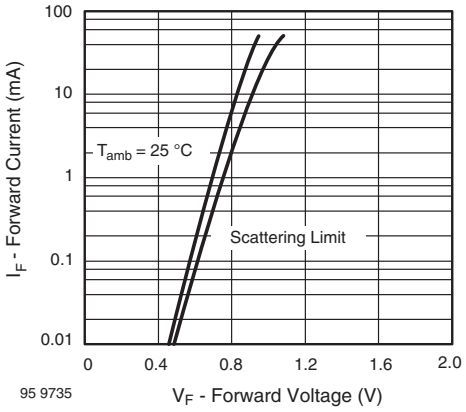


Fig. 1 - Forward Current vs. Forward Voltage

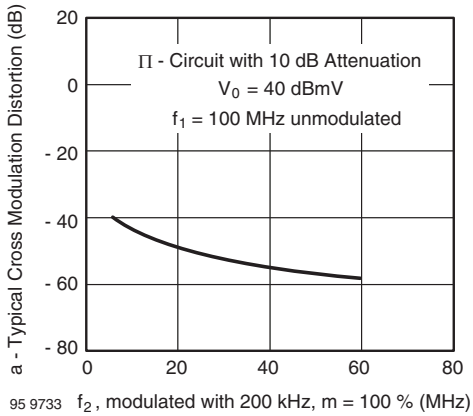


Fig. 3 - Typ. Cross Modulation Distortion vs. Frequency f_2

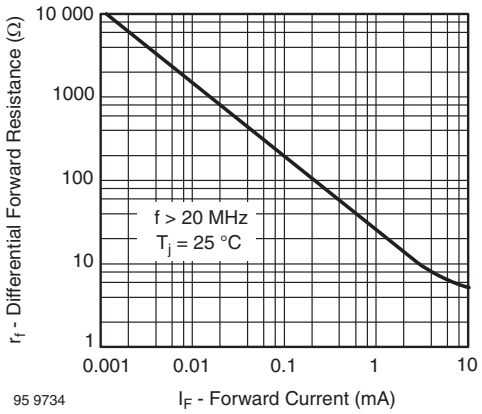
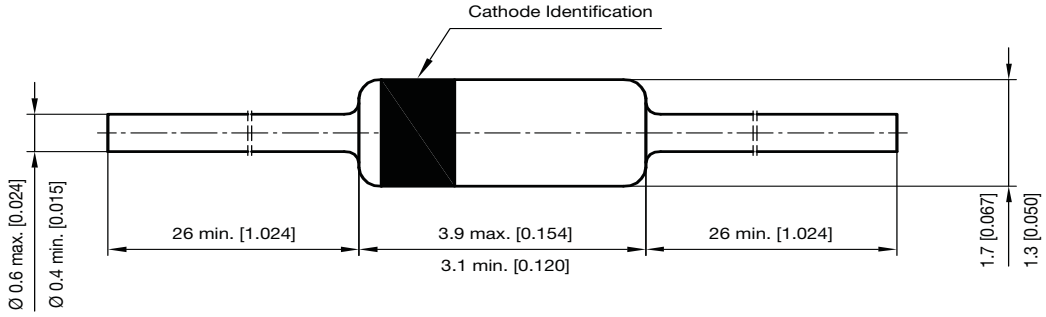


Fig. 2 - Differential Forward Resistance vs. Forward Current

PACKAGE DIMENSIONS in millimeters (inches): DO-35



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