

RF PIN Diodes - Single in DO-35

Features

- Wide frequency range 10 MHz to 1 GHz
- AEC-Q101 qualified
- Compliant to RoHS directive 2002/95/EC and in accordance to WEEE 2002/96/EC
- Halogen-free according to IEC 61249-2-21 definition



RoHS
COMPLIANT
HALOGEN
FREE



94 9367

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

TAP/10 k per Ammopack (52 mm tape), 50 k/box

Parts Table

Part	Type differentiation	Ordering code	Type Marking	Remarks
BA479G	$V_R = 30 \text{ V}$, $Z_r > 5 \text{ k}\Omega$	BA479G-TR or BA479G-TAP	BA479G	Tape and Reel/Ammopack
BA479S	$V_R = 30 \text{ V}$, $Z_r > 9 \text{ k}\Omega$	BA479S-TR or BA479S-TAP	BA479S	Tape and Reel/Ammopack

Absolute Maximum Ratings

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

Parameter	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			1000	mV
Reverse current	$V_R = 30\text{ V}$		I_R			50	nA
Diode capacitance	$f = 100\text{ MHz}$, $V_R = 0$		C_D			0.5	pF
Differential forward resistance	$f = 100\text{ MHz}$, $I_F = 1.5\text{ mA}$		r_f			50	Ω
Reverse impedance	$f = 100\text{ MHz}$, $V_R = 0$	BA479G	z_r	5			k Ω
		BA479S	z_r	9			k Ω
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

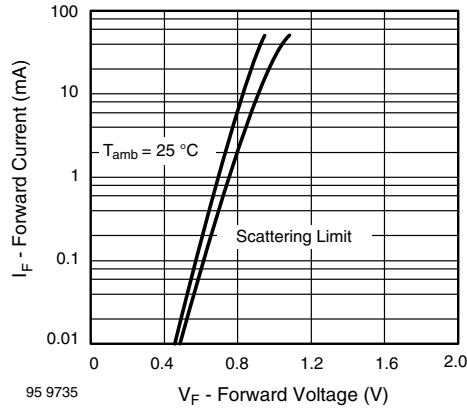


Figure 1. Forward Current vs. Forward Voltage

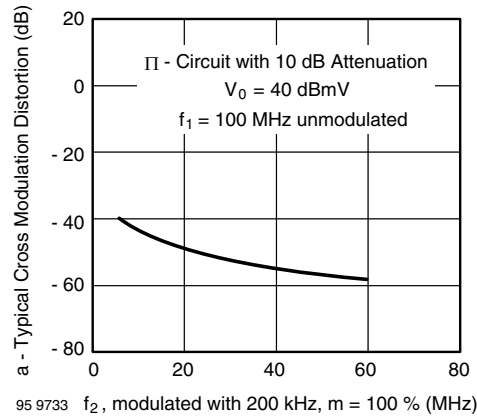


Figure 3. Typ. Cross Modulation Distortion vs. Frequency f_2

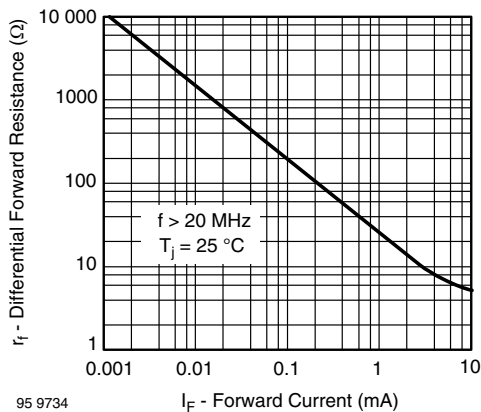
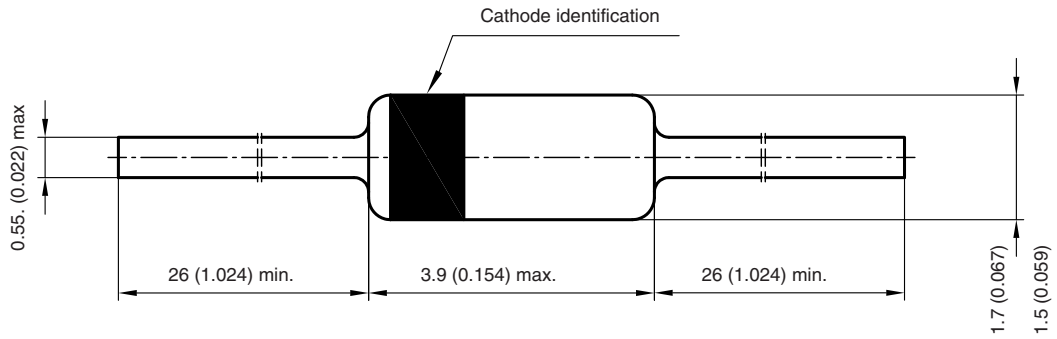


Figure 2. Differential Forward Resistance vs. Forward Current

Package Dimensions in millimeters (inches): **DO-35**



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