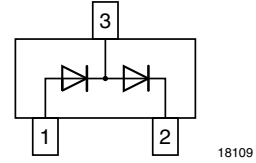
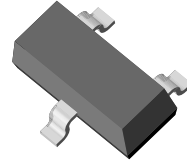
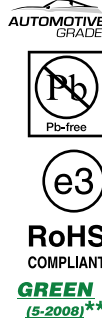


RF PIN Diodes - Dual Series

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
- Find out more about Vishay's Automotive Grade Product requirements at: www.vishay.com/applications



Applications

- Current controlled HF resistance in adjustable attenuators

Mechanical Data

Case: SOT-23

Weight: approx. 8.1 mg

Packaging codes/options:

08/3 k per 7" reel (8 mm tape), 15 k/box

Parts Table

Part	Ordering code	Type Marking	Remarks
S392D-V-GH	S392D-V-GH-08	PH4	Tape and Reel

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	on PC board 50 mm x 50 mm x 1.6 mm	R_{thJA}	500	K/W
Junction temperature		T_j	125	$^{\circ}\text{C}$
Storage temperature range		T_{stg}	- 55 to + 125	$^{\circ}\text{C}$

** Please see document "Vishay Material Category Policy": www.vishay.com/doc?99902

Electrical Characteristics

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

Parameter	Test condition	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	40		60	Ω
Reverse impedance	$f = 100\text{ MHz}, V_R = 0$	z_r	5			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

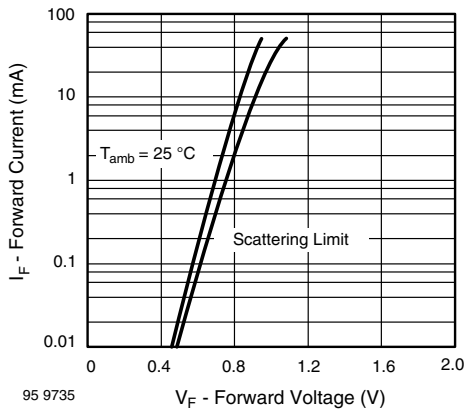


Figure 1. Forward Current vs. Forward Voltage

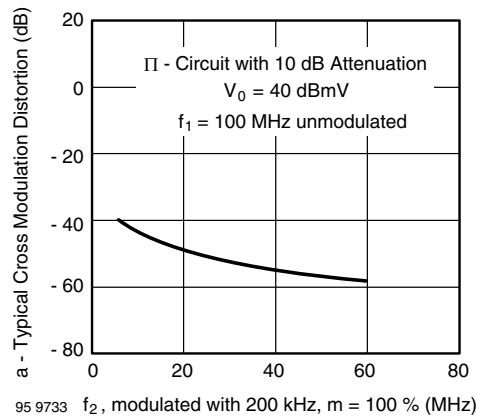


Figure 3. Typ. Cross Modulation Distortion vs. Frequency f_2

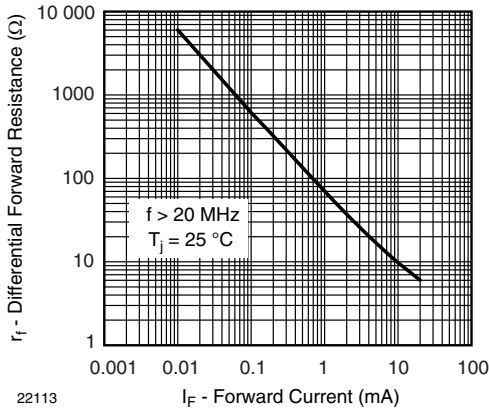
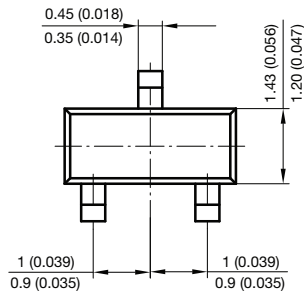
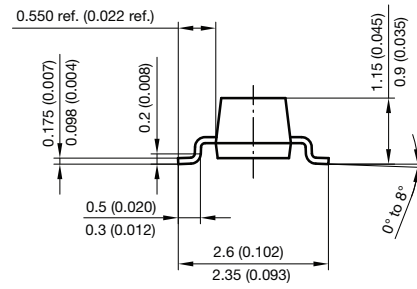
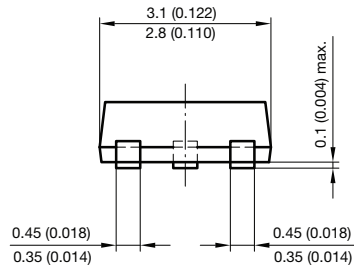
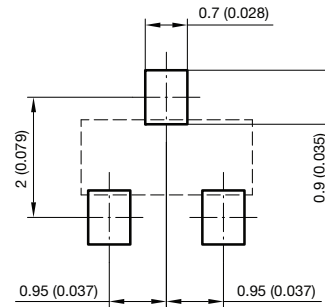


Figure 2. Differential Forward Resistance vs. Forward Current

Package Dimensions in millimeters (inches): SOT-23



Foot print recommendation:



Document no.: 6.541-5014.01-4

Rev. 8 - Date: 23.Sept.2009

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Disclaimer

All product specifications and data are subject to change without notice.

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