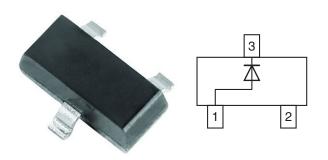


# Vishay Semiconductors

# **Small Signal Switching Diode**



### **FEATURES**

- Silicon epitaxial planar diode
- Fast switching diode in case SOT-23, especially suited for automatic insertion
- AEC-Q101 qualified available (part number on request)
- Base P/N-G3 green, commercial grade
- Material categorization: for definitions of compliance please see www.vishay.com/doc?99912





ROHS COMPLIANT HALOGEN FREE

GREEN (5-2008)

## **DESIGN SUPPORT TOOLS** click logo to get started



#### **MECHANICAL DATA**

Case: SOT-23

Weight: approx. 8.1 mg
Packaging codes / options:

18/10K per 13" reel (8 mm tape), 10K/box 08/3K per 7" reel (8 mm tape), 15K/box

PARTS TABLE					
PART	ORDERING CODE	CIRCUIT CONFIGURATION	TYPE MARKING	REMARKS	
MMBD914-G	MMBD914-G3-08 or MMBD914-G3-18	Single	5DG	Tape and reel	

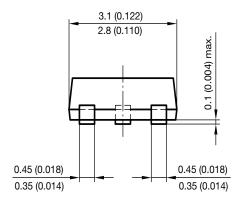
ABSOLUTE MAXIMUM RATINGS (T <sub>amb</sub> = 25 °C, unless otherwise specified)					
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT	
Peak reverse voltage		V <sub>RM</sub>	100	V	
Maximum average forward rectified current		I <sub>F(AV)</sub>	200	mA	
Maximum power dissipation	T <sub>amb</sub> = 25 °C	P <sub>tot</sub>	225	mW	

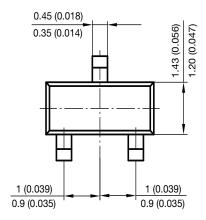
THERMAL CHARACTERISTICS (T <sub>amb</sub> = 25 °C, unless otherwise specified)					
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT	
Maximum junction temperature		Tj	150	°C	
Storage temperature range		T <sub>stg</sub>	-55 to +150	°C	
Operating temperature range		T <sub>op</sub>	-55 to +150	°C	

<b>ELECTRICAL CHARACTERISTICS</b> (T <sub>amb</sub> = 25 °C, unless otherwise specified)						
PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX.	UNIT
Forward voltage drop	I <sub>F</sub> = 10 mA	V <sub>F</sub>			1	V
Daylorga allument	V <sub>R</sub> = 20 V	I <sub>R</sub>			25	nA
Reverse current	V <sub>R</sub> = 75 V	I <sub>R</sub>			5	μA
Reverse recovery time	$I_F$ = 10 mA to $i_R$ = 1 mA, $V_R$ = 6 V, $R_L$ = 100 $\Omega$	t <sub>rr</sub>			4	ns
Diode capacitance	V <sub>R</sub> = 0 V, f = 1 MHz	C <sub>D</sub>			4	pF

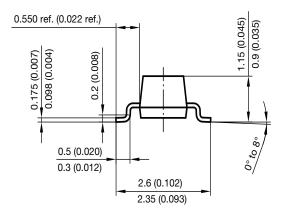
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## PACKAGE DIMENSIONS in millimeters (inches): SOT-23

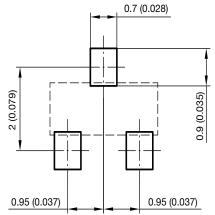




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#### Foot print recommendation:





## **Legal Disclaimer Notice**

Vishay

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