

Small Signal Switching Diode



FEATURES

- Silicon epitaxial planar diode
- Fast switching diode in case SOT-23, especially suited for automatic insertion.
- AEC-Q101 qualified
- Base P/N-E3 - RoHS-compliant, commercial grade
- Base P/N-HE3 - RoHS-compliant, AEC-Q101 qualified
- Material categorization: For definitions of compliance please see www.vishay.com/doc?99912


RoHS
COMPLIANT

MECHANICAL DATA

Case: SOT-23

Weight: approx. 8.8 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	INTERNAL CONSTRUCTION	TYPE MARKING	REMARKS
MMBD914	MMBD914-E3-08 or MMBD914-E3-18	Single diode	5D	Tape and reel
	MMBD914-HE3-08 or MMBD914-HE3-18			

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

PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Peak reverse voltage		V_{RM}	100	V
Maximum average forward rectified current		$I_{F(AV)}$	200	mA
Maximum power dissipation	$T_{amb} = 25\text{ }^{\circ}\text{C}$	P_{tot}	225	mW

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

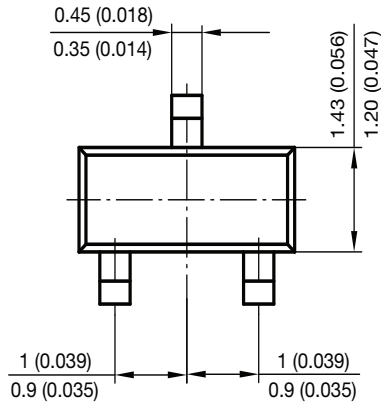
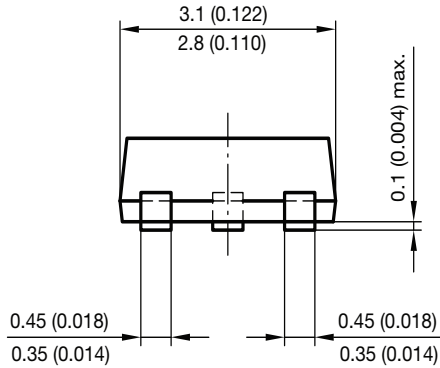
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Maximum junction temperature		T_j	150	$^{\circ}\text{C}$
Storage temperature range		T_{stg}	- 55 to + 150	$^{\circ}\text{C}$
Operating temperature range		T_{op}	- 55 to + 150	$^{\circ}\text{C}$

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

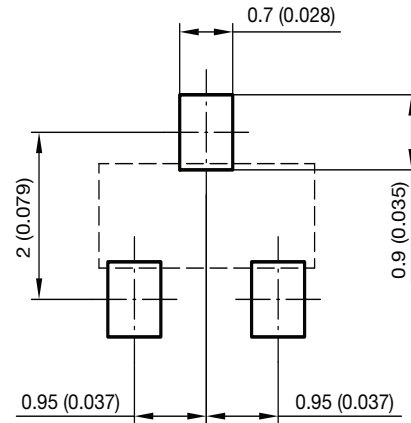
PARAMETER	TEST CONDITION	SYMBOL	MIN.	TYP.	MAX.	UNIT
Forward voltage drop	$I_F = 10\text{ mA}$	V_F			1	V
Reverse current	$V_R = 20\text{ V}$	I_R			25	nA
	$V_R = 75\text{ V}$	I_R			5	μA
Reverse recovery time	$I_F = 10\text{ mA}$ to $i_R = 1\text{ mA}$, $V_R = 6\text{ V}$, $R_L = 100\text{ }\Omega$	t_{rr}			4	ns
Diode capacitance	$V_R = 0\text{ V}$, $f = 1\text{ MHz}$	C_D			4	pF



PACKAGE DIMENSIONS in millimeters (inches): SOT-23



Foot print recommendation:



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