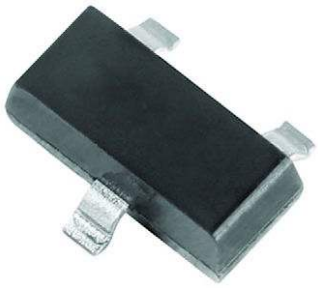
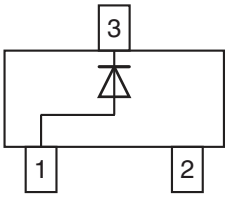
Small Signal Switching Diode





FEATURES

- Silicon epitaxial planar diode
- Fast switching diode in case SOT-23, especially suited for automatic insertion
- AEC-Q101 qualified available
- 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

Pb-free

e3

RoHS COMPLIANT

DESIGN SUPPORT TOOLS click logo to get started

3D Models Available

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	CIRCUIT CONFIGURATION	TYPE MARKING	REMARKS
MMBD914	MMBD914-E3-08 or MMBD914-E3-18	Single	5D	Tape and reel
	MMBD914-HE3-08 or MMBD914-HE3-18			

ABSOLUTE MAXIMUM RATINGS (T_{amb} = 25 °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 °C	P_{tot}	225	mW

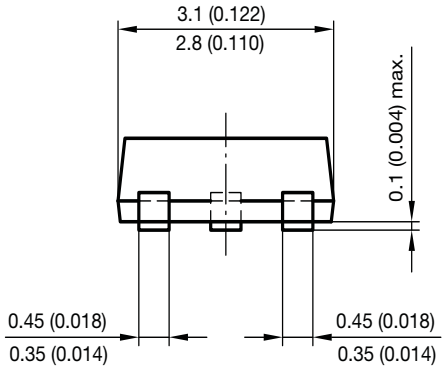
THERMAL CHARACTERISTICS (T_{amb} = 25 °C, unless otherwise specified)

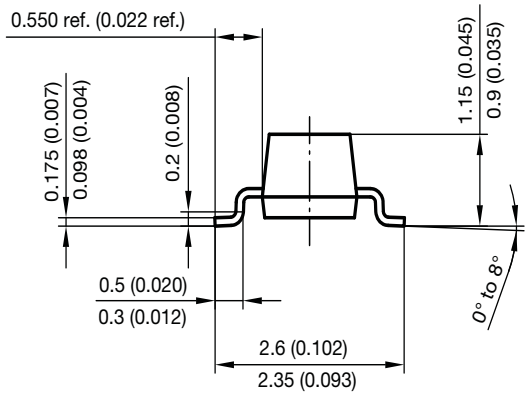
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Maximum junction temperature		T_j	150	°C
Storage temperature range		T_{stg}	-55 to +150	°C
Operating temperature range		T_{op}	-55 to +150	°C

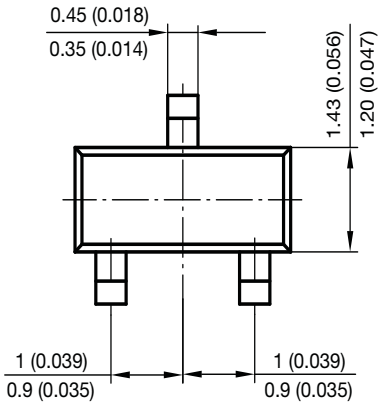
ELECTRICAL CHARACTERISTICS (T_{amb} = 25 °C, unless otherwise specified)

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

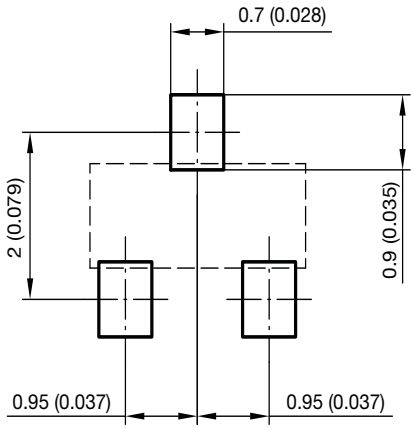
PACKAGE DIMENSIONS in millimeters (inches): **SOT-23**







Foot print recommendation:



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