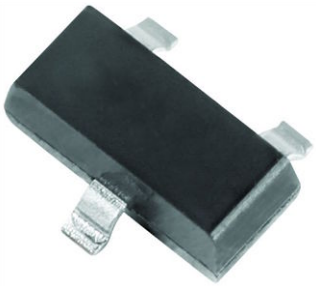
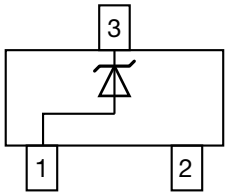
Small Signal Zener Diodes





FEATURES

- Silicon planar low noise Zener diodes
- 350 mW high quality voltage regulator designed for low leakage, low current and low noise applications
- ± 5 % tolerance on V_Z
- High temperature soldering guaranteed: 260 °C / 4 x 10 s at terminals
- AEC-Q101 qualified available
- ESD capability according to AEC-Q101:
  Human body model > 8 kV
  Machine model > 800 V
- 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

AUTOMOTIVE GRADE Available

Pb-free

e3

RoHS COMPLIANT

DESIGN SUPPORT TOOLS

click logo to get started

3D Models Available

PRIMARY CHARACTERISTICS		
PARAMETER	VALUE	UNIT
V_Z range nom.	2.4 to 6.2	V
Test current I_{ZT}	0.25	mA
V_Z specification	Pulse current	
Circuit configuration	Single	

ORDERING INFORMATION			
DEVICE NAME	ORDERING CODE	TAPED UNITS PER REEL	MINIMUM ORDER QUANTITY
MMBZ4617 to MMBZ4627	MMBZ4617-E3-08 to MMBZ4627-E3-08	3000 (8 mm tape on 7" reel)	15 000/box
	MMBZ4617-HE3-08 to MMBZ4627-HE3-08		
	MMBZ4617-E3-18 to MMBZ4627-E3-18	10 000 (8 mm tape on 13" reel)	10 000/box
	MMBZ4617-HE3-18 to MMBZ4627-HE3-18		

PACKAGE				
PACKAGE NAME	WEIGHT	MOLDING COMPOUND FLAMMABILITY RATING	MOISTURE SENSITIVITY LEVEL	SOLDERING CONDITIONS
SOT-23	8.8 mg	UL 94 V-0	MSL level 1 (according J-STD-020)	260 °C/10 s at terminals

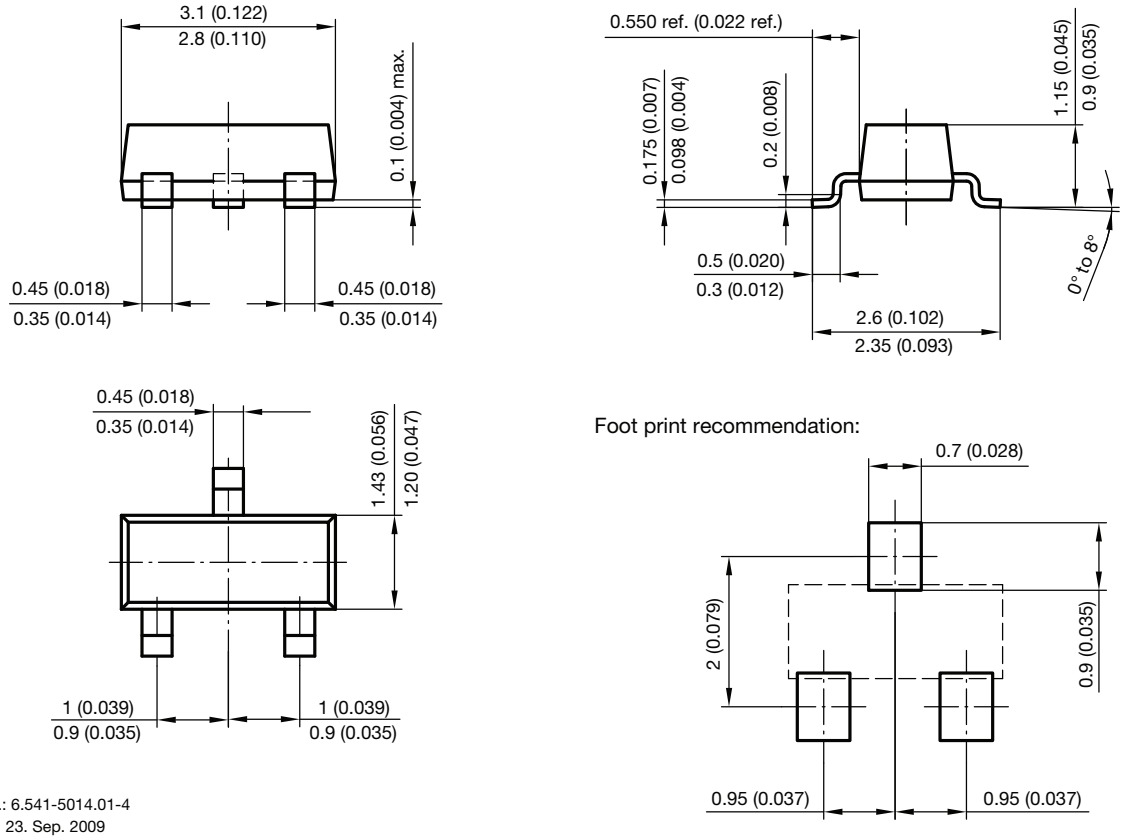
ABSOLUTE MAXIMUM RATINGS (T_{amb} = 25 °C, unless otherwise specified)				
PARAMETER	TEST CONDITION	SYMBOL	VALUE	UNIT
Power dissipation	On FR - 5 board using recommended solder pad layout	P_{tot}	350	mW
Forward voltage, maximum	I_F = 200 mA	V_F	1.1	V
Forward voltage, typical	I_F = 200 mA	V_F	0.97	V
Thermal resistance junction to ambient air	On FR - 5 board using recommended solder pad layout	R_{thJA}	420	°C/W
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)										
PART NUMBER	**MARKING CODE**	**ZENER VOLTAGE RANGE (1)**			**TEST CURRENT**	**REVERSE LEAKAGE CURRENT**		**DYNAMIC RESISTANCE**	**ZENER CURRENT**	**NOISE DENSITY**
		V_Z at I_{ZT1}			I_{ZT1}	I_R at V_R		Z_{ZT} at I_{ZT1}	I_{ZM}	N_D at I_{ZT1}
		V			mA	µA	V	Ω	mA	µV/√Hz
		MIN.	NOM.	MAX.		MAX.		MAX.	MAX.	MAX.
MMBZ4617	G17	2.280	2.4	2.520	0.25	2	1	1400	95	1
MMBZ4618	G18	2.565	2.7	2.835	0.25	1	1	1500	90	1
MMBZ4619	G19	2.850	3	3.150	0.25	0.8	1	1600	85	1
MMBZ4620	G20	3.135	3.3	3.465	0.25	7.5	1.5	1650	80	1
MMBZ4621	G21	3.420	3.6	3.780	0.25	7.5	2	1700	75	1
MMBZ4622	G22	3.705	3.9	4.095	0.25	5	2	1650	70	1
MMBZ4623	G23	4.085	4.3	4.515	0.25	4	2	1600	65	1
MMBZ4624	G24	4.465	4.7	4.935	0.25	10	3	1550	60	1
MMBZ4625	G25	4.845	5.1	5.355	0.25	10	3	1500	55	2
MMBZ4626	G26	5.320	5.6	5.880	0.25	10	4	1400	50	4
MMBZ4627	G27	5.890	6.2	6.510	0.25	10	5	1200	45	5

Note

(1) V_Z tested with 5 ms pulse

PACKAGE DIMENSIONS in millimeters (inches): SOT-23



Document no.: 6.541-5014.01-4
Rev. 8 - Date: 23. Sep. 2009
17418

Disclaimer

ALL PRODUCT, PRODUCT SPECIFICATIONS AND DATA ARE SUBJECT TO CHANGE WITHOUT NOTICE TO IMPROVE RELIABILITY, FUNCTION OR DESIGN OR OTHERWISE.

Vishay Intertechnology, Inc., its affiliates, agents, and employees, and all persons acting on its or their behalf (collectively, “Vishay”), disclaim any and all liability for any errors, inaccuracies or incompleteness contained in any datasheet or in any other disclosure relating to any product.

Vishay makes no warranty, representation or guarantee regarding the suitability of the products for any particular purpose or the continuing production of any product. To the maximum extent permitted by applicable law, Vishay disclaims (i) any and all liability arising out of the application or use of any product, (ii) any and all liability, including without limitation special, consequential or incidental damages, and (iii) any and all implied warranties, including warranties of fitness for particular purpose, non-infringement and merchantability.

Statements regarding the suitability of products for certain types of applications are based on Vishay's knowledge of typical requirements that are often placed on Vishay products in generic applications. Such statements are not binding statements about the suitability of products for a particular application. It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts. Product specifications do not expand or otherwise modify Vishay's terms and conditions of purchase, including but not limited to the warranty expressed therein.

Hyperlinks included in this datasheet may direct users to third-party websites. These links are provided as a convenience and for informational purposes only. Inclusion of these hyperlinks does not constitute an endorsement or an approval by Vishay of any of the products, services or opinions of the corporation, organization or individual associated with the third-party website. Vishay disclaims any and all liability and bears no responsibility for the accuracy, legality or content of the third-party website or for that of subsequent links.

Except as expressly indicated in writing, Vishay products are not designed for use in medical, life-saving, or life-sustaining applications or for any other application in which the failure of the Vishay product could result in personal injury or death. Customers using or selling Vishay products not expressly indicated for use in such applications do so at their own risk. Please contact authorized Vishay personnel to obtain written terms and conditions regarding products designed for such applications.

No license, express or implied, by estoppel or otherwise, to any intellectual property rights is granted by this document or by any conduct of Vishay. Product names and markings noted herein may be trademarks of their respective owners.

单击下面可查看定价，库存，交付和生命周期等信息

>>Vishay(威世)