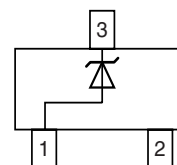
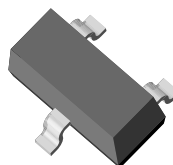


Small Signal Zener Diodes

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/4X10 seconds at terminals.
- Lead (Pb)-free component
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



18078

Mechanical Data

Case: SOT-23 Plastic case

Weight: approx. 8.8 mg

Terminals: Solderable per MIL-STD-750, method 2026

Packaging codes/options:

GS18 / 10 k per 13 " reel (8 mm tape), 10 k/box

GS08 / 3 k per 7 " reel (8 mm tape), 15 k/box

Absolute Maximum Ratings

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

Parameter	Test condition	Symbol	Value	Unit
Power dissipation		P_{tot}	350 ¹⁾	mW
Forward voltage, maximum	$I_F = 200\text{ mA}$	V_F	1.1	V
Forward voltage, typical	$I_F = 200\text{ mA}$	V_F	0.97	V

¹⁾ On FR - 5 board using recommended solder pad layout

Thermal Characteristics

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

Parameter	Test condition	Symbol	Value	Unit
Maximum junction temperature		T_j	150	°C
Storage temperature range		T_S	- 55 to + 150	°C
Thermal resistance junction to ambient air		R_{thJA}	420 ¹⁾	°C/W

¹⁾ On FR - 5 board using recommended solder pad layout

MMBZ4617-V to MMBZ4627-V

Vishay Semiconductors

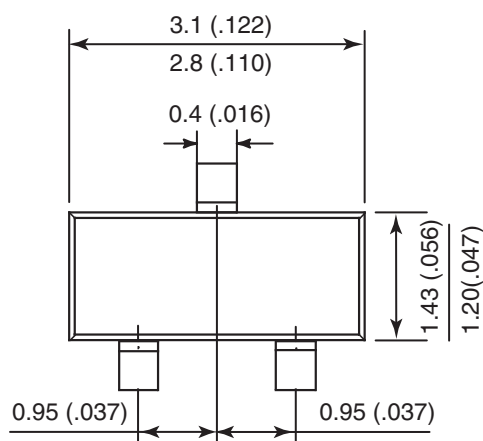
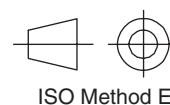
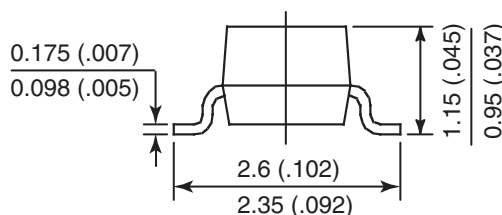
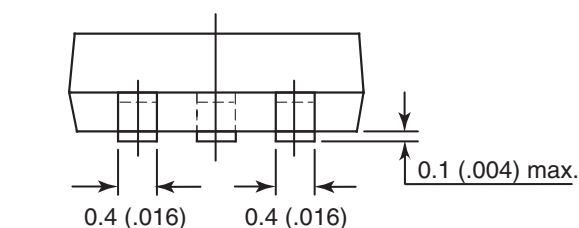


Electrical Characteristics

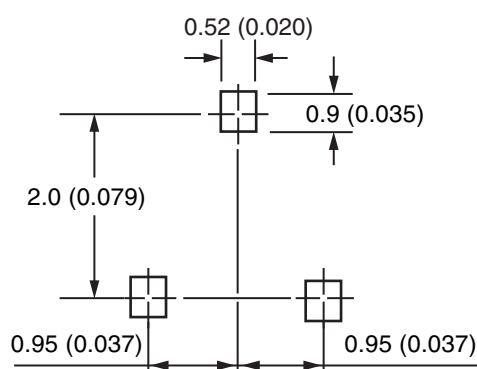
Partnumber	Marking Code	Zener ¹⁾ Voltage	Test Current	Maximum Zener Impedance	Maximum Reverse Leakage Current		Maximum Zener Current	Maximum Noise Density
		$V_Z @ I_{ZT}$	I_{ZT}	$Z_{ZT} @ I_{ZT}$	I_R	V_R	I_{ZM}	$N_D @ I_{ZT} = 250 \mu A$
		V	μA	Ω	μA	V	mA	$\mu V/\sqrt{Hz}$
MMBZ4617-V	G17	2.4	250	1400	2.0	1.0	95	1.0
MMBZ4618-V	G18	2.7	250	1500	1.0	1.0	90	1.0
MMBZ4619-V	G19	3.0	250	1600	0.8	1.0	85	1.0
MMBZ4620-V	G20	3.3	250	1650	7.5	1.5	80	1.0
MMBZ4621-V	G21	3.6	250	1700	7.5	2.0	75	1.0
MMBZ4622-V	G22	3.9	250	1650	5.0	2.0	70	1.0
MMBZ4623-V	G23	4.3	250	1600	4.0	2.0	65	1.0
MMBZ4624-V	G24	4.7	250	1550	10	3.0	60	1.0
MMBZ4625-V	G25	5.1	250	1500	10	3.0	55	2.0
MMBZ4626-V	G26	5.6	250	1400	10	4.0	50	4.0
MMBZ4627-V	G27	6.2	250	1200	10	5.0	45	5.0

Note: ¹⁾ V_Z tested with 5 ms pulse

Package Dimensions in mm (Inches)



Mounting Pad Layout



17418



Ozone Depleting Substances Policy Statement

It is the policy of Vishay Semiconductor GmbH to

1. Meet all present and future national and international statutory requirements.
2. Regularly and continuously improve the performance of our products, processes, distribution and operating systems with respect to their impact on the health and safety of our employees and the public, as well as their impact on the environment.

It is particular concern to control or eliminate releases of those substances into the atmosphere which are known as ozone depleting substances (ODSs).

The Montreal Protocol (1987) and its London Amendments (1990) intend to severely restrict the use of ODSs and forbid their use within the next ten years. Various national and international initiatives are pressing for an earlier ban on these substances.

Vishay Semiconductor GmbH has been able to use its policy of continuous improvements to eliminate the use of ODSs listed in the following documents.

1. Annex A, B and list of transitional substances of the Montreal Protocol and the London Amendments respectively
2. Class I and II ozone depleting substances in the Clean Air Act Amendments of 1990 by the Environmental Protection Agency (EPA) in the USA
3. Council Decision 88/540/EEC and 91/690/EEC Annex A, B and C (transitional substances) respectively.

Vishay Semiconductor GmbH can certify that our semiconductors are not manufactured with ozone depleting substances and do not contain such substances.

We reserve the right to make changes to improve technical design
and may do so without further notice.

Parameters can vary in different applications. All operating parameters must be validated for each customer application by the customer. Should the buyer use Vishay Semiconductors products for any unintended or unauthorized application, the buyer shall indemnify Vishay Semiconductors against all claims, costs, damages, and expenses, arising out of, directly or indirectly, any claim of personal damage, injury or death associated with such unintended or unauthorized use.

Vishay Semiconductor GmbH, P.O.B. 3535, D-74025 Heilbronn, Germany



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