

## Product Overview

### MMBZ A-SERIES: Dual Common Anode Zener Diode Protection

For complete documentation, see the data sheet.

These dual monolithic silicon Zener diodes are designed for applications requiring transient overvoltage protection capability. They are intended for use in voltage and ESD sensitive equipment such as computers, printers, business machines, communication systems, medical equipment and other applications. Their dual junction common anode design protects two separate lines using only one package. These devices are ideal for situations where board space is at a premium.

#### Features

- Working Peak Reverse Voltage Range - 3 V to 26 V
- SOT-23 Package Allows Either Two Separate Unidirectional Configurations or a Single Bidirectional Configuration
- Standard Zener Breakdown Voltage Range - 5.6 V to 33 V
- Peak Power - 24 or 40 Watts @ 1.0 ms (Unidirectional)
- ESD Rating of Class N (exceeding 16 kV) per the Human Body Model
- Maximum Clamping Voltage @ Peak Pulse Current
- Low Leakage < 5.0  $\mu$  A
- Flammability Rating UL 94V-O Mechanical Characteristics:
- CASE: Void-free, transfer-molded, thermosetting plastic case
- FINISH: Corrosion resistant finish, easily solderable

For more features, see the data sheet

#### Benefits

- Wide Range of Zener Breakdown Voltages

#### Applications

- Voltage Regulation
- Waveform Clipping
- MOSFET Gate Protection

#### End Products

- General Usage Device: Suitable for many different end products

## Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	V <sub>Z</sub> Typ (V)	P Max (W)	Package Type
MMBZ12VALT1G	0.0257	Pb-free Halide free non AEC-Q and PPAP	Active	12	0.225	SOT-23-3
MMBZ15VALT1G	0.0257	Pb-free Halide free non AEC-Q and PPAP	Active	15	0.225	SOT-23-3
MMBZ16VALT1G	0.0257	Pb-free Halide free non AEC-Q and PPAP	Active	16	0.225	SOT-23-3
MMBZ16VTALT1G	0.0425	Pb-free Halide free non AEC-Q and PPAP	Active	16	0.225	SOT-23-3
MMBZ18VALT1G	0.0257	Pb-free Halide free non AEC-Q and PPAP	Active	18	0.225	SOT-23-3
MMBZ20VALT1G	0.0257	Pb-free Halide free non AEC-Q and PPAP	Active	20	0.225	SOT-23-3
MMBZ27VALT1G	0.0257	Pb-free Halide free non AEC-Q and PPAP	Active	27	0.225	SOT-23-3
MMBZ27VALT3G	0.0257	Pb-free Halide free non AEC-Q and PPAP	Active	27	0.225	SOT-23-3
MMBZ33VALT1G	0.0257	Pb-free Halide free non AEC-Q and PPAP	Active	33	0.225	SOT-23-3
MMBZ47VALT1G	0.0387	Pb-free Halide free non AEC-Q and PPAP	Active	47	0.225	SOT-23-3
MMBZ47VTALT1G	0.0425	Pb-free Halide free non AEC-Q and PPAP	Active	47	0.225	SOT-23-3
MMBZ5V6ALT1G	0.0237	Pb-free Halide free non AEC-Q and PPAP	Active	5.6	0.225	SOT-23-3

MMBZ5V6ALT3G	0.0237	Pb-free Halide free non AEC-Q and PPAP	Active	5.6	0.225	SOT-23-3
MMBZ6V2ALT1G	0.0257	Pb-free Halide free non AEC-Q and PPAP	Active	6.2	0.225	SOT-23-3
MMBZ6V8ALT1G	0.0257	Pb-free Halide free non AEC-Q and PPAP	Active	6.8	0.225	SOT-23-3
MMBZ9V1ALT1G	0.0257	Pb-free Halide free non AEC-Q and PPAP	Active	9.1	0.225	SOT-23-3
SZMMBZ12VALT1G	0.0316	AEC Qualified PPAP Capable Pb-free Halide free	Active	12	0.225	SOT-23-3
SZMMBZ15VALT1G	0.0316	AEC Qualified PPAP Capable Pb-free Halide free	Active	15	0.225	SOT-23-3
SZMMBZ15VALT3G	0.0316	AEC Qualified PPAP Capable Pb-free Halide free	Active	15	0.225	SOT-23-3
SZMMBZ16VALT1G	0.0539	AEC Qualified PPAP Capable Pb-free Halide free	Active	16	0.225	SOT-23-3
SZMMBZ16VTALT1G	0.0587	AEC Qualified PPAP Capable Pb-free Halide free	Active	16	0.225	SOT-23-3
SZMMBZ18VALT1G	0.0316	AEC Qualified PPAP Capable Pb-free Halide free	Active	18	0.225	SOT-23-3
SZMMBZ18VALT3G	0.0316	AEC Qualified PPAP Capable Pb-free Halide free	Active	18	0.225	SOT-23-3

SZMMBZ20VALT1G	0.0275	AEC Qualified PPAP Capable Pb-free Halide free	Active	20	0.225	SOT-23-3
SZMMBZ20VALT3G	0.0275	AEC Qualified PPAP Capable Pb-free Halide free	Active	20	0.225	SOT-23-3
SZMMBZ27VALT1G	0.0316	AEC Qualified PPAP Capable Pb-free Halide free	Active	27	0.225	SOT-23-3
SZMMBZ27VALT3G	0.0316	AEC Qualified PPAP Capable Pb-free Halide free	Active	27	0.225	SOT-23-3
SZMMBZ33VALT1G	0.0316	AEC Qualified PPAP Capable Pb-free Halide free	Active	33	0.225	SOT-23-3
SZMMBZ33VALT3G	0.0316	AEC Qualified PPAP Capable Pb-free Halide free	Active	33	0.225	SOT-23-3
SZMMBZ47VALT1G	0.0533	AEC Qualified PPAP Capable Pb-free Halide free	Active	47	0.225	SOT-23-3
SZMMBZ47VALT3G	0.0587	AEC Qualified PPAP Capable Pb-free Halide free	Active	47	0.225	SOT-23-3
SZMMBZ5V6ALT1G	0.0275	AEC Qualified PPAP Capable Pb-free Halide free	Active	5.6	0.225	SOT-23-3
SZMMBZ5V6ALT3G		AEC Qualified PPAP Capable Pb-free Halide free	Active	5.6	0.225	SOT-23-3
SZMMBZ6V2ALT1G	0.0275	AEC Qualified PPAP Capable Pb-free Halide free	Active	6.2	0.225	SOT-23-3

SZMMBZ6V8ALT1G	0.0365	AEC Qualified PPAP Capable Pb-free Halide free	Active	6.8	0.225	SOT-23-3
SZMMBZ6V8ALT3G	0.0365	AEC Qualified PPAP Capable Pb-free Halide free	Active	6.8	0.225	SOT-23-3
SZMMBZ9V1ALT3G	0.0771	AEC Qualified PPAP Capable Pb-free Halide free	Active	9.1	0.225	SOT-23-3

For more information please contact your local sales support at [www.onsemi.com](http://www.onsemi.com).

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