

## Product Overview

### ESD5Z: ESD Protection Diode, SOD-523

For complete documentation, see the [data sheet](#).

The ESD5Z Series is designed to protect voltage sensitive components from ESD and transient voltage events. Excellent clamping capability, low leakage, and fast response time, make these parts ideal for ESD protection on designs where board space is at a premium. Because of its small size, it is suited for use in cellular phones, portable devices, digital cameras, power supplies and many other portable applications.

### Features

- IEC61000-4-2 up to +/- 30 kV contact
- 8x20 us pulse up to 240W
- SZ Prefix for Automotive and Other Applications Requiring Unique Site and Control Change Requirements
- AEC-Q101 Qualified and PPAP Capable

### Applications

- General ESD protection for handheld devices
- TVS protection for charger line and battery contacts in handheld products

## Part Electrical Specifications

Product	Pricing (\$/Unit)	Compliance	Status	Interface	Number of Lines	Direction	C Max (pF)	V <sub>(BR)</sub> Min (V)	V <sub>RWM</sub> Max (V)	I <sub>R</sub> Max (μA)	P <sub>PK</sub> Max (W)	Package Type
ESD5Z12T1G	0.024	Pb-free	Active	General I/O	1	Unidirectional	55	14.1	12	0.01	240	SOD-523-2
		Halide free										
		non AEC-Q and PPAP										
ESD5Z12T5G	0.024	Pb-free	Active	General I/O	1	Unidirectional	55	14.1	12	0.01	240	SOD-523-2
		Halide free										
		non AEC-Q and PPAP										
ESD5Z2.5T1G	0.024	Pb-free	Active	General I/O	1	Unidirectional	145	4	2.5	6	120	SOD-523-2
		Halide free										
		non AEC-Q and PPAP										
ESD5Z2.5T5G	0.024	Pb-free	Active	General I/O	1	Unidirectional	145	4	2.5	6	120	SOD-523-2
		Halide free										
		non AEC-Q and PPAP										
ESD5Z3.3T1G	0.024	Pb-free	Active	General I/O	1	Unidirectional	105	5	3.3	0.05	158	SOD-523-2
		Halide free										
		non AEC-Q and PPAP										
ESD5Z3.3T5G	0.024	Pb-free	Active	General I/O	1	Unidirectional	105	5	3.3	0.05	158	SOD-523-2
		Halide free										
		non AEC-Q and PPAP										
ESD5Z5.0T1G	0.024	Pb-free	Active	General I/O	1	Unidirectional	80	6.2	5	0.05	174	SOD-523-2
		Halide free										
		non AEC-Q and PPAP										
ESD5Z5.0T5G	0.024	Pb-free	Active	General I/O	1	Unidirectional	80	6.2	5	0.05	174	SOD-523-2
		Halide free										
		non AEC-Q and PPAP										
ESD5Z6.0T1G	0.024	Pb-free	Active	General I/O	1	Unidirectional	70	6.8	6	0.01	181	SOD-523-2
		Halide free										
		non AEC-Q and PPAP										
ESD5Z6.0T5G	0.024	Pb-free	Active	General I/O	1	Unidirectional	70	6.8	6	0.01	181	SOD-523-2
		Halide free										
		non AEC-Q and PPAP										
ESD5Z7.0T1G	0.024	Pb-free	Active	General I/O	1	Unidirectional	65	7.5	7	0.01	200	SOD-523-2
		Halide free										
		non AEC-Q and PPAP										
ESD5Z7.0T5G	0.0441	Pb-free	Active	General I/O	1	Unidirectional	65	7.5	7	0.01	200	SOD-523-2
		Halide free										
		non AEC-Q and PPAP										
SZESD5Z12T1G	0.0513	AEC Qualified	Active	General I/O	1	Unidirectional	55	14.1	12	0.01	240	SOD-523-2
		PPAP Capable										
		Pb-free										
		Halide free										
SZESD5Z12T5G	0.0513	AEC Qualified	Active	General I/O	1	Unidirectional	55	14.1	12	0.01	240	SOD-523-2
		PPAP Capable										
		Pb-free										
		Halide free										
SZESD5Z2.5T1G	0.0513	AEC Qualified	Active	General I/O	1	Unidirectional	145	4	2.5	6	120	SOD-523-2
		PPAP Capable										
		Pb-free										
		Halide free										

SZESD5Z2.5T5G	0.0513	AEC Qualified PPAP Capable Pb-free Halide free	Active	General I/O	1	Unidirectional	145	4	2.5	6	120	SOD-523-2
SZESD5Z3.3T1G	0.0513	AEC Qualified PPAP Capable Pb-free Halide free	Active	General I/O	1	Unidirectional	105	5	3.3	0.05	158	SOD-523-2
SZESD5Z3.3T5G	0.0513	AEC Qualified PPAP Capable Pb-free Halide free	Active	General I/O	1	Unidirectional	105	5	3.3	0.05	158	SOD-523-2
SZESD5Z5.0T1G	0.0727	AEC Qualified PPAP Capable Pb-free Halide free	Active	General I/O	1	Unidirectional	80	6.2	5	0.05	174	SOD-523-2
SZESD5Z5.0T5G	0.0727	AEC Qualified PPAP Capable Pb-free Halide free	Active	General I/O	1	Unidirectional	80	6.2	5	0.05	174	SOD-523-2
SZESD5Z6.0T1G	0.0677	AEC Qualified PPAP Capable Pb-free Halide free	Active	General I/O	1	Unidirectional	70	6.8	6	0.01	181	SOD-523-2
SZESD5Z6.0T5G	0.0677	AEC Qualified PPAP Capable Pb-free Halide free	Active	General I/O	1	Unidirectional	70	6.8	6	0.01	181	SOD-523-2
SZESD5Z7.0T1G	0.0727	AEC Qualified PPAP Capable Pb-free Halide free	Active	General I/O	1	Unidirectional	65	7.5	7	0.01	200	SOD-523-2
SZESD5Z7.0T5G	0.0727	AEC Qualified PPAP Capable Pb-free Halide free	Active	General I/O	1	Unidirectional	65	7.5	7	0.01	200	SOD-523-2

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

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