

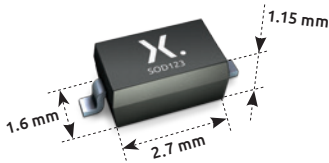
> SOD123

Improved system reliability



Our SOD123 offers you an alternative 'gull wing' with a broad portfolio in a small footprint package for easier wave and reflow soldering of AEC-Q101 qualified diode and rectifier series.

Efficient design



- > 2.7 x 1.6 mm footprint, only 1.15 mm high
- > Rth j-s: 45 K/W
- > Reverse power dissipation: max. 40 W

Quality built-in



- > Gull wing design for easy wave and reflow soldering
- > High speed switching and polarity protection
- > Energy efficient power conversion
- > Supports automatic optical inspection (AOI)
- > AEC-Q101 qualified

Broad choice in standard solution



1-stop-shop

- > Switching and Schottky diodes
- > Medium power rectifiers
- > Industrial standard E24 Zener voltage range



Multi-usage industrial package



- > Energy efficient power conversion
- > General rectification and voltage regulation
- > High speed switching and polarity protection

SOD123 Product range

Switching diodes				
Type name	I_F max [A]	V_R max [V]	$V_F @ I_F$ [mV]	$I_R @ V_R$ [μ A]
BAS16GW	0.215	100	1250@ $I_F=0.15$ A	0.5@ $V_R=80$ V
BAS116GW	0.215	75	1250@ $I_F=0.15$ A	0.005@ $V_R=75$ V
BAS21GW	0.200	200	1250@ $I_F=0.200$ A	0.1@ $V_R=200$ V

Schottky diodes				
Type name	I_F max [A]	V_R max [V]	$V_F @ I_F$ [mV]	$I_R @ V_R$ [μ A]
BAT46GW	0.250	100	850@ $I_F=0.250$ A	9@ $V_R=100$ V
BAT54GW	0.200	30	500@ $I_F=0.03$ A	2@ $V_R=25$ V

Medium power rectifiers				
Type name	I_F max [A]	V_R max [V]	$V_F @ I_F$ [mV]	$I_R @ V_R$ [μ A]
PMEG2005EGW	0.5	20	390@ $I_F=0.5$ A	200@ $V_R=20$ V
PMEG3005EGW	0.5	30	430@ $I_F=0.5$ A	150@ $V_R=20$ V
PMEG3010EGW	1.0	30	560@ $I_F=1$ A	150@ $V_R=30$ V
PMEG3020EGW	2.0	30	620@ $I_F=2$ A	1000@ $V_R=30$ V
PMEG4005EGW	0.5	40	470@ $I_F=0.5$ A	100@ $V_R=40$ V
PMEG4010EGW	1.0	40	640@ $I_F=1$ A	100@ $V_R=40$ V
PMEG4010CEGW	1.0	40	570@ $I_F=1$ A	50@ $V_R=40$ V
PMEG6010CEGW	1.0	60	660@ $I_F=1$ A	50@ $V_R=60$ V

Zener diodes						
Series	# types	V_z tolerance	V_z nom. [V]	I_F max [mA]	P_{ZSM} [W]	P_{tot} [mW]
BZT52 series	37	$\pm 5\%$	2.4 - 75	250	40	550
PDZ-GW series	29	$\pm 5\%$	2.4 - 36	200	40	550

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Date of release:
August 2017