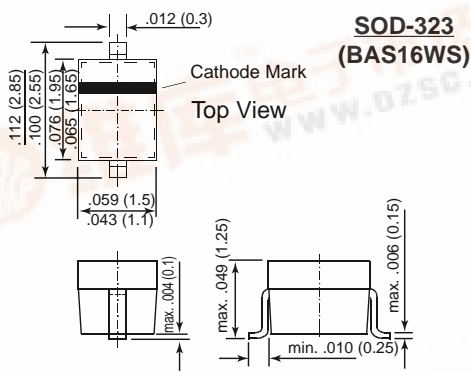
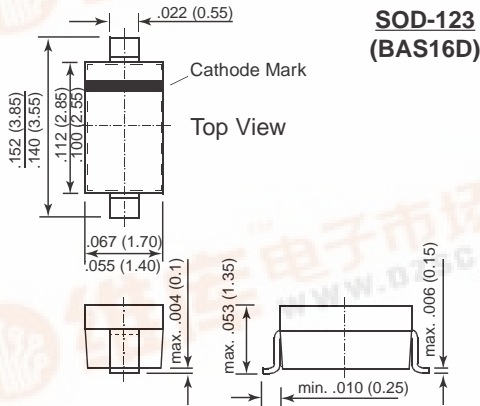


# BAS16D, BAS16WS

## SMALL SIGNAL DIODES



Dimensions in inches and (millimeters)

### FEATURES

- ◆ Silicon Epitaxial Planar Diode
- ◆ Fast switching diode.
- ◆ Also available in case SOT-23 with designation BAS16.



### MECHANICAL DATA

#### BAS16D

Case: SOD-123 Plastic Case

Weight: approx. 0.01 g

Marking Code: A6

#### BAS16WS

Case: SOD-323 Plastic Case

Weight: approx. 0.004 g

Marking Code: A6

### MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	SYMBOL	VALUE	UNIT
Reverse Voltage	$V_R$	75	V
Peak Reverse Voltage	$V_{RM}$	100	V
Forward Current (continuous)	$I_F$	250	mA
Non-Repetitive Peak Forward Current			
at $t = 1\mu s$	$I_{FSM}$	2.0	A
at $t = 1ms$	$I_{FSM}$	1.0	A
at $t = 1s$	$I_{FSM}$	0.5	A
Power Dissipation at $T_{amb} = 25^\circ C$			
	<b>BAS16D</b>	350 <sup>1)</sup>	mW
	<b>BAS16WS</b>	200 <sup>1)</sup>	mW
Maximum Junction Temperature	$T_j$	150	°C
Storage Temperature Range	$T_s$	-65 to +150 <sup>1)</sup>	°C

<sup>1)</sup> Valid provided electrodes are kept at ambient temperature.

# BAS16D, BAS16W

## ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified

	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage					
at $I_F = 1$ mA	$V_F$	–	–	715	mV
at $I_F = 10$ mA	$V_F$	–	–	855	mV
at $I_F = 50$ mA	$V_F$	–	–	1.00	V
at $I_F = 150$ mA	$V_F$	–	–	1.25	V
Leakage Current					
at $V_R = 25$ V, $T_j = 150$ °C	$I_R$	–	–	30	μA
at $V_R = 75$ V	$I_R$	–	–	1	μA
at $V_R = 75$ V, $T_j = 150$ °C	$I_R$	–	–	50	μA
Capacitance	$C_{tot}$	–	–	2	pF
at $V_R = 0$ ; $f = 1$ MHz					
Reverse Recovery Time	$t_{rr}$	–	–	6	ns
from $I_F = 10$ mA to $I_R = 10$ mA $I_R = 1$ mA, $R_L = 100\Omega$					
Thermal Resistance Junction to Ambient Air	$R_{thJA}$	–	–	375 <sup>1)</sup> 650 <sup>1)</sup>	°C/W °C/W
	<b>BAS16D</b> <b>BAS16WS</b>				

<sup>1)</sup>Valid provided that electrodes are kept at ambient temperature