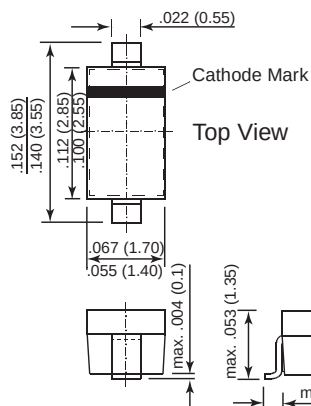


BAS16D, BAS16WS

SMALL SIGNAL DIODES



SOD-123
(BAS16D)

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

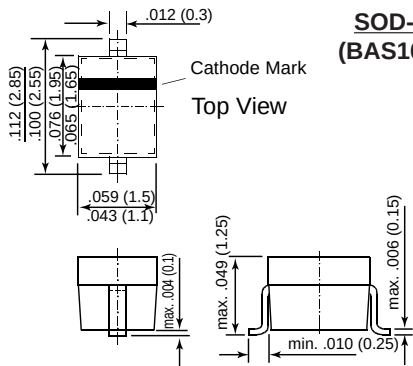
Marking Code: A6

BAS16WS

Case: SOD-323 Plastic Case

Weight: approx. 0.004 g

Marking Code: A6



SOD-323
(BAS16WS)

Dimensions in inches and (millimeters)

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 = 1μs	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 °C			
BAS16D	P _{tot}	350 ¹⁾	mW
BAS16WS		200 ¹⁾	mW
Maximum Junction Temperature	T _j	150	°C
Storage Temperature Range	T _S	- 65 to +150 ¹⁾	°C

¹⁾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 $I_F = 1 \text{ mA}$	V_F	—	—	715	mV
at $I_F = 10 \text{ mA}$	V_F	—	—	855	mV
at $I_F = 50 \text{ mA}$	V_F	—	—	1.00	V
at $I_F = 150 \text{ mA}$	V_F	—	—	1.25	V
Leakage Current at $V_R = 25 \text{ V}$, $T_j = 150 \text{ °C}$	I_R	—	—	30	μA
at $V_R = 75 \text{ V}$	I_R	—	—	1	μA
at $V_R = 75 \text{ V}$, $T_j = 150 \text{ °C}$	I_R	—	—	50	μA
Capacitance at $V_R = 0$; $f = 1 \text{ MHz}$	C_{tot}	—	—	2	pF
Reverse Recovery Time from $I_F = 10 \text{ mA}$ to $I_R = 10 \text{ mA}$ $I_R = 1 \text{ mA}$, $R_L = 100\Omega$	t_{rr}	—	—	6	ns
Thermal Resistance Junction to Ambient Air	R_{thJA}	—	—	375 ¹⁾ 650 ¹⁾	$^{\circ}\text{C/W}$ $^{\circ}\text{C/W}$
	BAS16D BAS16WS				

¹⁾Valid provided that electrodes are kept at ambient temperature