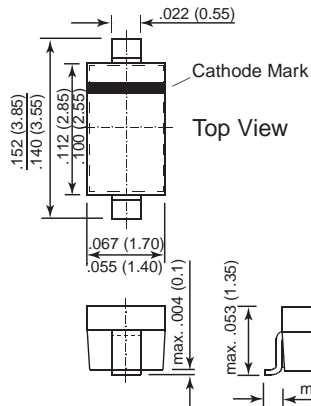
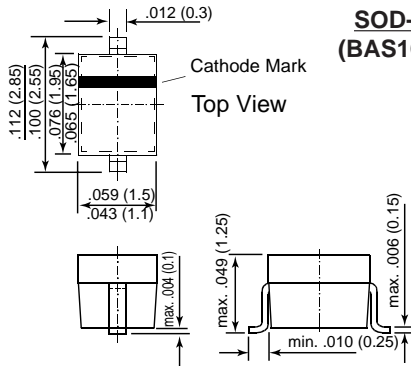


BAS16D, BAS16WS

SMALL SIGNAL DIODES



**SOD-123
(BAS16D)**



**SOD-323
(BAS16WS)**

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 $T_{amb} = 25\text{ }^\circ\text{C}$			
	BAS16D	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 $I_F = 1$ 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 at $V_R = 0$; $f = 1$ MHz	C_{tot}	–	–	2	pF
Reverse Recovery Time from $I_F = 10$ mA to $I_R = 10$ mA $I_R = 1$ mA, $R_L = 100\Omega$	t_{rr}	–	–	6	ns
Thermal Resistance Junction to Ambient Air	R_{thJA}	–	–	375 ¹⁾ 650 ¹⁾	°C/W °C/W

¹⁾Valid provided that electrodes are kept at ambient temperature