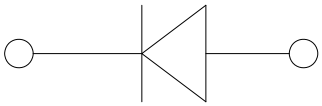
BAS16W

Small-Signal Fast Switching Diodes



Features
- V_R 75V
- I_{FAV} 200mA

Typical Applications
- Extreme fast switches

Mechanical Data
- **Package:** SOD123G
- **Terminals:** Tin plated leads, solderable per J-STD-002 and JESD22-B102
- **Polarity:** Cathode line denotes the cathode end
- **Marking:** T4

■ Maximum Ratings (Ta=25℃ Unless otherwise specified)

PARAMETER	SYMBOL	UNIT	Conditions	VALUE
Repetitive peak reverse voltage	V_{RRM}	V		100
Reverse voltage	V_R	V		75
Peak forward surge current	I_{FSM}	A	Pulse width=1 us Pulse width=1 s	2 0.5
Average forward current	I_{FAV}	mA		300
Power dissipation	P_{tot}	mW		350
Maximum junction temperature	T_j	℃		-55 ~+150
Storage temperature range	T_{stg}	℃		-55 ~+150
Thermal Resistance	R_{thJA}	K/W		315

■ Electrical Characteristics (T_a=25℃ Unless otherwise specified)

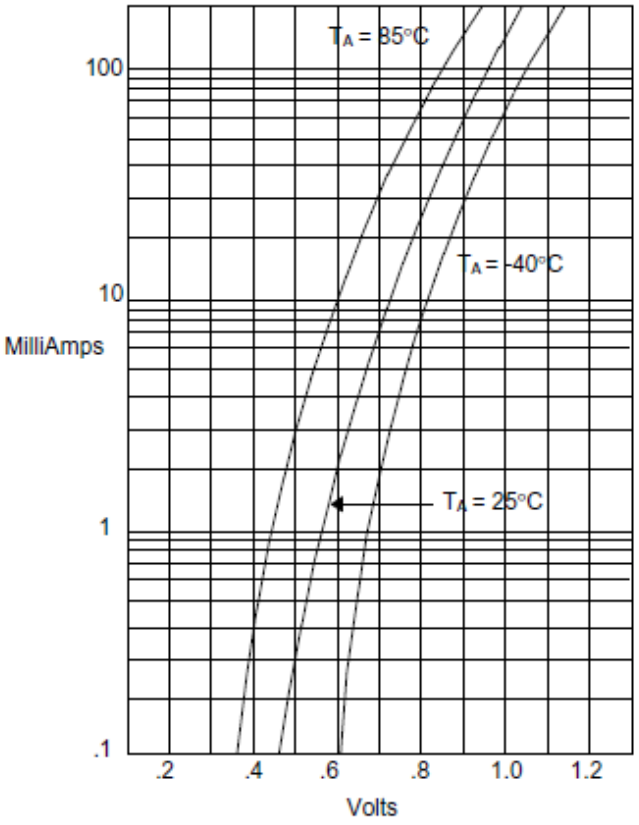
PARAMETER	SYMBOL	UNIT	Conditions	Min	Typ	Max
Maximum Forward voltage	V_F	V	I_F=1mA			0.715
	V_F	V	I_F=10mA			0.855
	V_F	V	I_F=50mA			1.0
	V_F	V	I_F=150mA			1.25
Maximum Reverse current	I_R	μA	V_R=75V			1.0
Minimum Breakdown voltage	V_R	V	I_R=100μA	100		
Maximum Diode capacitance	C_D	pF	V_R=V_F=0V, f =1MHz			4
Maximum Reverse recovery time	t_{rr}	ns	I_F=10mA,Irr=0.1I_R,R_L=100Ω			6

■ Ordering Information (Example)

PREFERED P/N	PACKING CODE	UNIT WEIGHT(g)	MINIMUM PACKAGE(pcs)	INNER BOX QUANTITY(pcs)	OUTER CARTON QUANTITY(pcs)	DELIVERY MODE
BAS16W	F2	Approximate 0.011	3000	30000	120000	7" reel

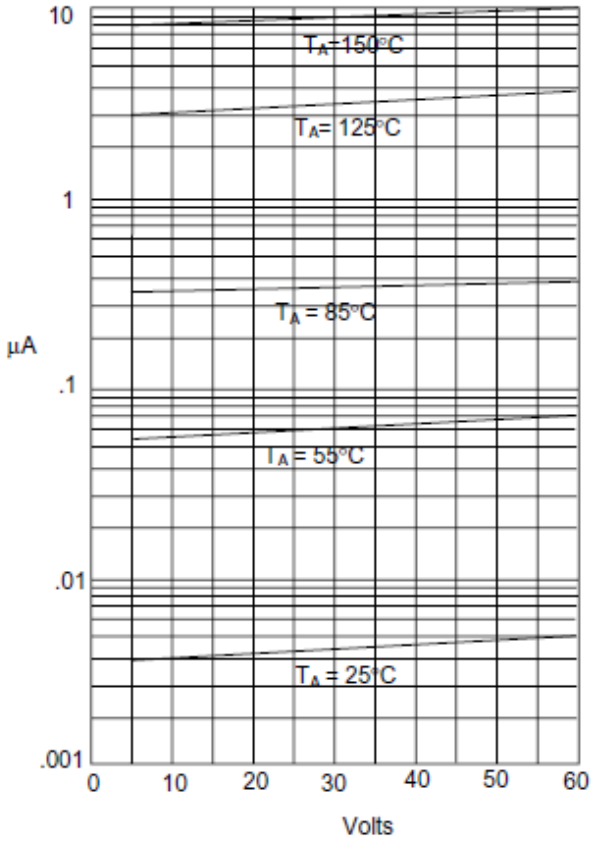
■ Characteristics (Typical)

Figure 1
Typical Forward Characteristics



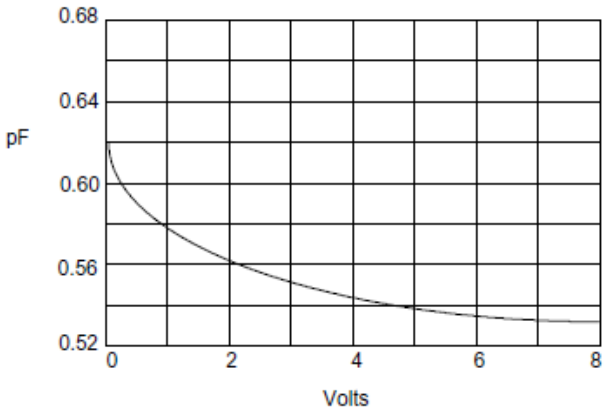
Instantaneous Forward Current - Amperes*versus*
Instantaneous Forward Voltage - Volts

Figure 2
Typical Reverse Characteristics



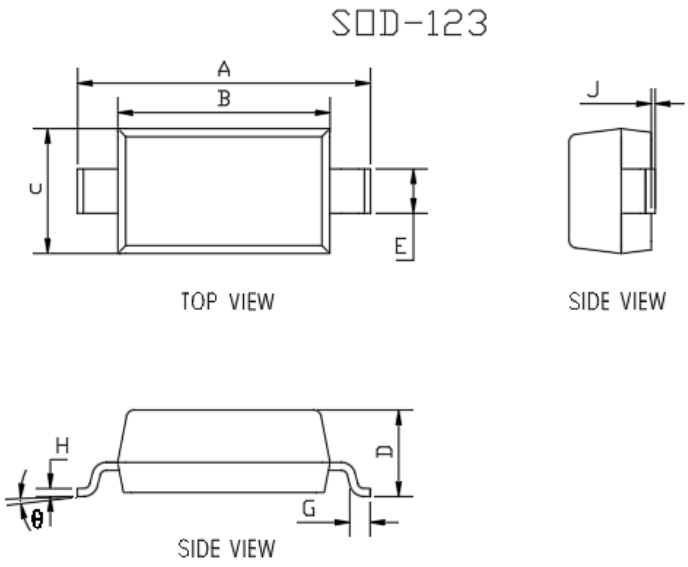
Instantaneous Reverse Current - MicroAmperes*versus*
Reverse Voltage - Volts

Figure 3
Diode Capacitance



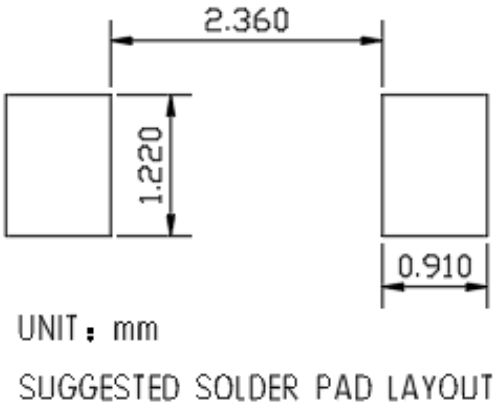
Diode Capacitance - pF*versus*
Reverse Voltage - Volts

■ Outline Dimensions



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MN	MAX
A	0.140	0.152	3.550	3.850
B	0.100	0.112	2.550	2.850
C	0.055	0.071	1.400	1.800
D	0.037	0.053	0.950	1.350
E	0.020	0.028	0.510	0.710
G	0.006	0.018	0.150	0.450
H	0.003	0.010	0.080	0.250
J	0.000	0.006	0.000	0.150
θ	0	8°	0	8°

■ Soldering Footprint



Disclaimer

The information presented in this document is for reference only. Yangzhou Yangjie Electronic Technology Co., Ltd. reserves the right to make changes without notice for the specification of the products displayed herein to improve reliability, function or design or otherwise.

The product listed herein is designed to be used with ordinary electronic equipment or devices, and not designed to be used with equipment or devices which require high level of reliability and the malfunction of with would directly endanger human life (such as medical instruments, transportation equipment, aerospace machinery, nuclear-reactor controllers, fuel controllers and other safety devices), Yangjie or anyone on its behalf, assumes no responsibility or liability for any damages resulting from such improper use of sale.

This publication supersedes & replaces all information previously supplied. For additional information, please visit our website http:// www.21yangjie.com , or consult your nearest Yangjie's sales office for further assistance.