

■ 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°C 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		200
Power dissipation	P_{tot}	mW		350
Maximum junction temperature	T_j	°C		-55 ~+150
Storage temperature range	T_{stg}	°C		-55 ~+150
Thermal Resistance	R_{thJA}	K/W		315

■ ELECTRICAL CHARACTERISTICS (Ta=25°C Unless otherwise specified)

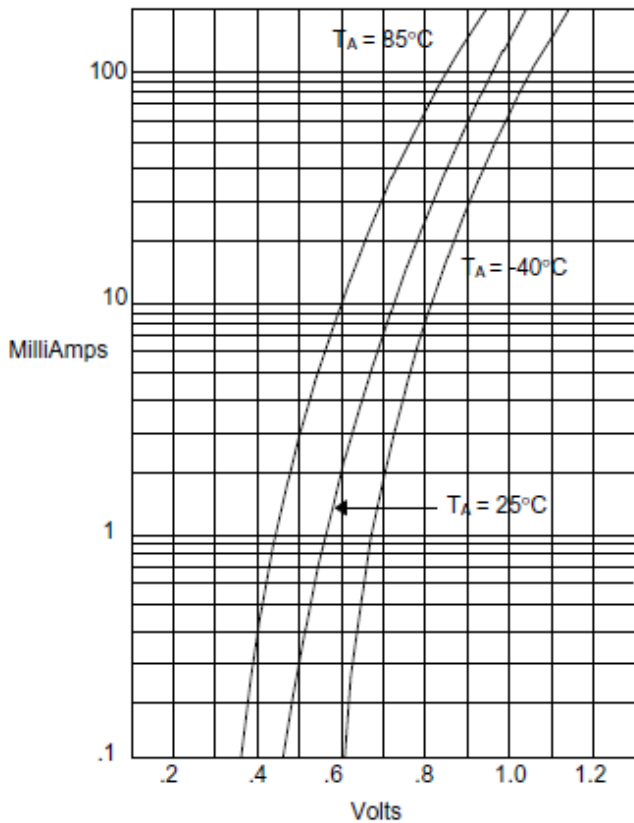
PARAMETER	SYMBOL	UNIT	Conditions	Min	Typ	Max
Maximum Forward voltage	V_F	V	$I_F=1mA$			0.715
	V_F	V	$I_F=10mA$			0.855
	V_F	V	$I_F=50mA$			1.0
	V_F	V	$I_F=150mA$			1.25
Maximum Reverse current	I_R	μA	$V_R=75V$			1.0
Minimum Breakdown voltage	V_R	V	$I_R=100\mu A$	100		
Maximum Diode capacitance	C_D	pF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

■ **PACKAGING INFORMATION**

PREFERRED 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)**

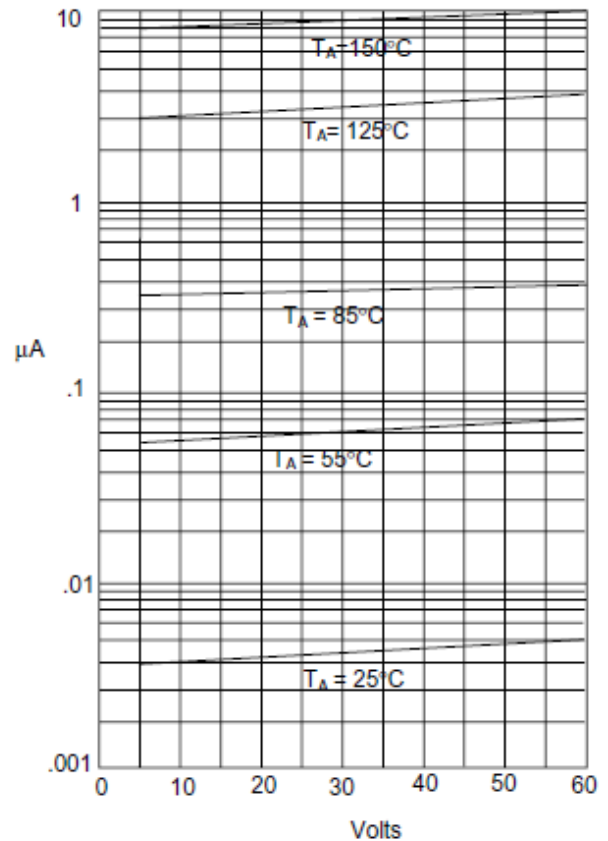
Figure 1
Typical Forward Characteristics



Instantaneous Forward Current - Amperes versus
Instantaneous Forward Voltage - Volts

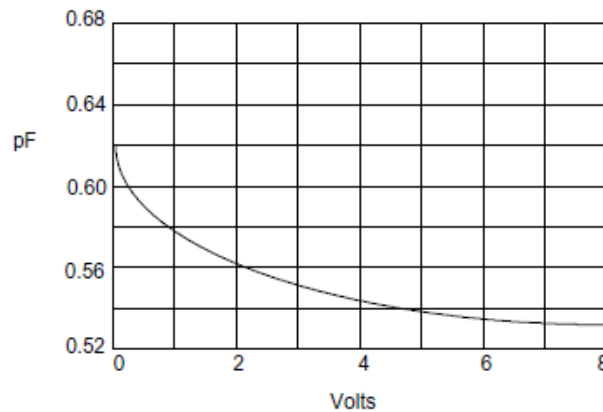
Figure 2

Typical Reverse Characteristics



Instantaneous Reverse Current - μA versus
Instantaneous Reverse Voltage - Volts

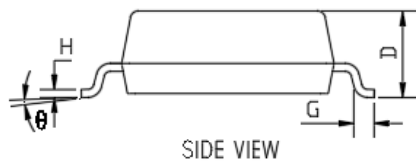
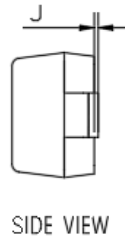
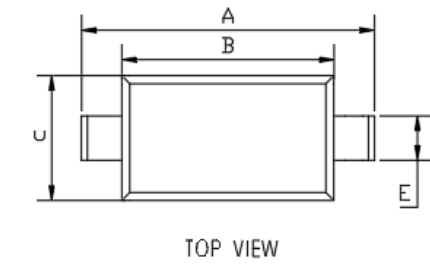
Figure 3
Diode Capacitance



Diode Capacitance - pF versus
Reverse Voltage - Volts

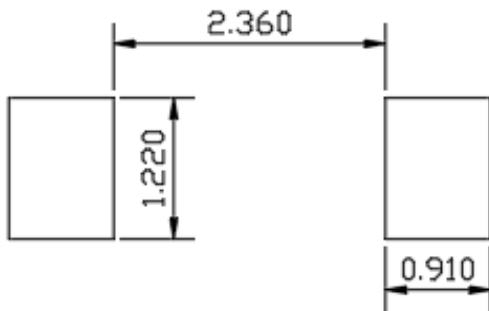
■ **OUTLINE DIMENSIONS**

SOD-123



DIMENSIONS				
DIM	INCHES		MM	
	MIN	MAX	MIN	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°

■ **SUGGESTED PAD LAYOUT**



UNIT : mm