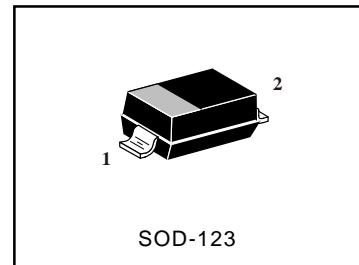


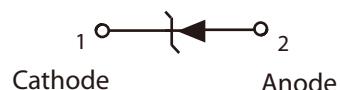
## HIGH VOLTAGE SURFACE MOUNT SWITCHING DIODE

### FEATURE

- Fast Switching Speed
- High Conductance
- High Reverse Breakdown Voltage Rating
- We declare that the material of product compliance with RoHS requirements.



Equivalent Circuit Diagram



### Ordering Information(Pb-free)

Device	Marking	Shipping
FDS3004T1G	34W	3000/Tape&Reel
FDS3004T3G	34W	10000/Tape&Reel

**Maximum Ratings @ TA=25°C unless otherwise specified**

Characteristic	Symbol	Value		Unit
Repetitive Peak Reverse Voltage	VRRM	350		V
RMS Reverse Voltage	VR(RMS)	240		V
Forward Continuous Current(Note 2)	IF	200		mA
Non-Repetitive Peak Forward Surge Current @t=1.0μs @t=1.0s	IFSM	4.0		A
		1.0		
Power Dissipation(Note 2)	Pd	410		mW
Thermal Resistance Junction to Ambient Air(Note 2)	R <sub>0JA</sub>	500		°C/W
Operating and Storage Temperature Range	T <sub>j</sub> , T <sub>STG</sub>	-65 to +150		°C

**Electrical Characteristics @ TA=25°C unless otherwise specified, per element**

Characteristic	Symbol	Min	Typ	MAX	Unit	Test Condition
Reverse Breakdown Voltage(Note 1)	V(BR)R	350			V	IR=150μA
Forward Voltage(Note 1)	VF		0.78	0.87	V	IF=20mA
			0.93	1.0	V	IF=100mA
			1.03	1.25		IF=200mA
Reverse Current(Note 1)	IR		30	100	nA	VR=240V
			35	100	μA	VR=240V, T <sub>j</sub> =150 °C
Total Capacitance	C <sub>T</sub>		1.0	5.0	Pf	VR=0V, f=1.0MHZ
Reverse Recovery Time	T <sub>rr</sub>			50	ns	IF=IR=30mA Irr=3.0mA, RL=100Ω

Notes: 1. Short duration test pulse used to minimize self-heating effect.

2. Part mounted on FR-4 board with recommended pad layout.

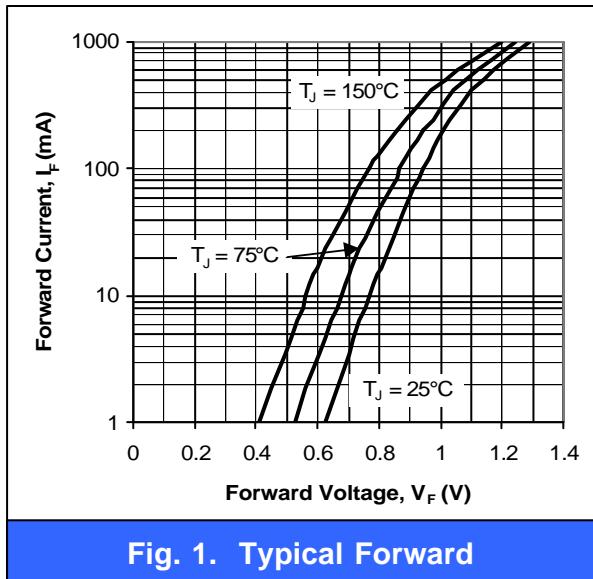


Fig. 1. Typical Forward

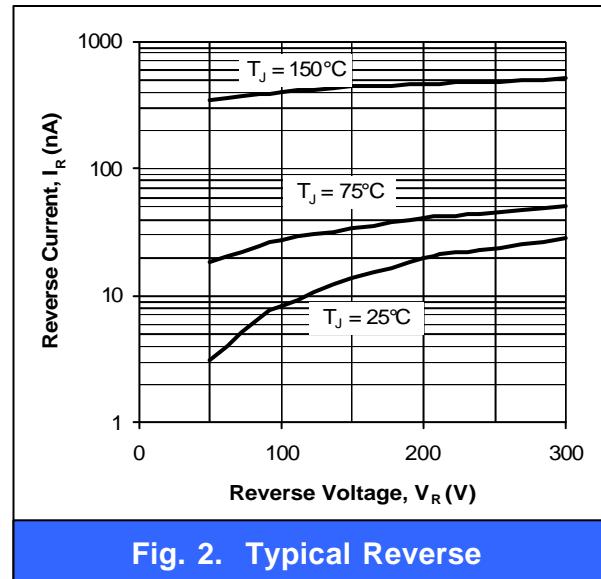


Fig. 2. Typical Reverse

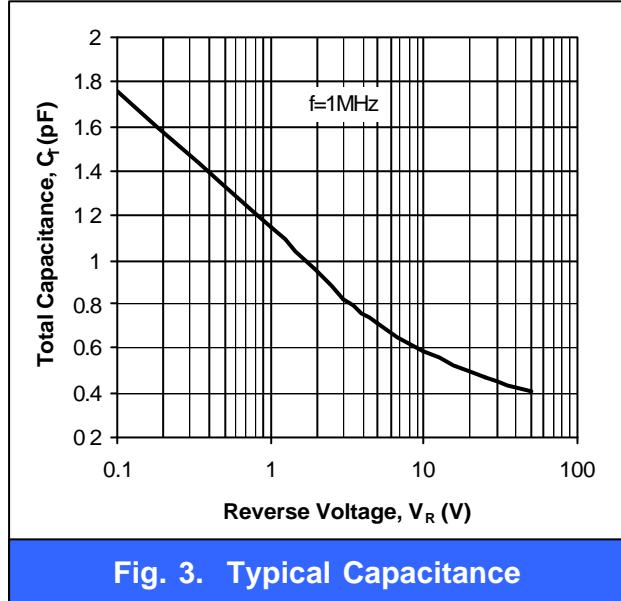
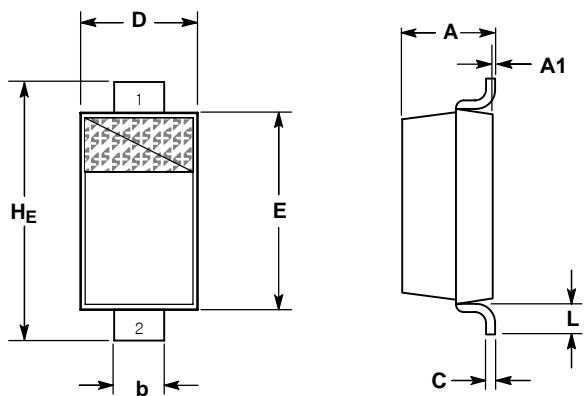


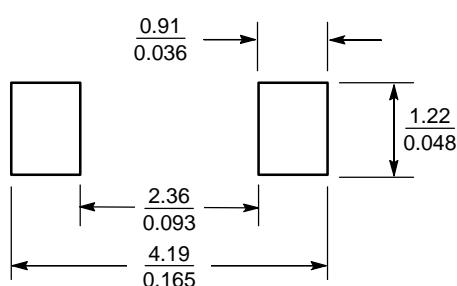
Fig. 3. Typical Capacitance

**SOD-123**


NOTES:  
 1. DIMENSIONING AND TOLERANCING PER ANSI Y14.5M, 1982.  
 2. CONTROLLING DIMENSION: INCH.

DIM	MILLIMETERS			INCHES		
	MIN	NOM	MAX	MIN	NOM	MAX
A	0.94	1.17	1.35	0.037	0.046	0.053
A1	0.00	0.05	0.10	0.000	0.002	0.004
b	0.51	0.61	0.71	0.020	0.024	0.028
c	—	—	0.15	—	—	0.006
D	1.40	1.60	1.80	0.055	0.063	0.071
E	2.54	2.69	2.84	0.100	0.106	0.112
H <sub>E</sub>	3.56	3.68	3.86	0.140	0.145	0.152
L	0.25	—	—	0.010	—	—

STYLE 1:  
 PIN 1. CATHODE  
 2. ANODE

**SOLDERING FOOTPRINT\***


SCALE 10:1  $\left( \frac{\text{mm}}{\text{inches}} \right)$