

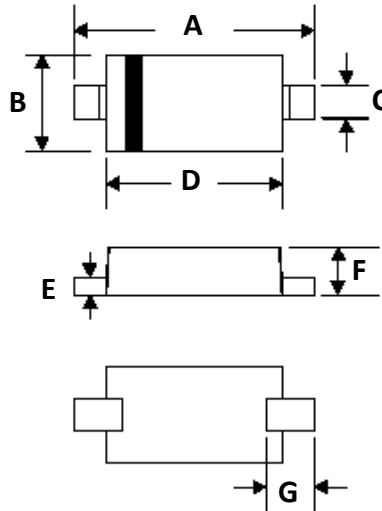
Ultra Switching Diode

Features

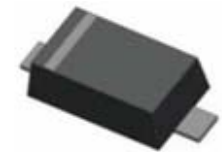
- Ultra high speed switching application
- Low Forward Voltage
- Fast Reverse Recovery Time
- Small Total Capacitance

Mechanical Data

- Case: SOD-323F Plastic Package
- Weight: Approx. 0.004g
- Packaging:
 - 3K per 7" reel (8mm tape)
 - 45K inner box, 180K out box
- Marking: T6 (BAV16WS)
A8 (BAV19WS)



SOD-323F



SOD-323 Flat LEAD



ELECTRICAL SYMBOL

Dim	Millimeters
A	2.65±0.20
B	1.30±0.10
C	0.30±0.05
D	1.70±0.10
E	0.10±0.02
F	0.80±0.15
G	>0.25

Maximum Ratings & Thermal Characteristics

Tamb=25°C, unless otherwise specified

Characteristic	Symbol	Max Ratings		Unit
		BAV16WS	BAV19WS	
Maximum Peak Reverse Voltage	V_{RM}	85	120	V
Reverse Voltage	V_R	80	100	V
Continuous Forward Current	I_F	300	200	mA
Surge Current (1µs)	I_{FSM}	2	2	A
Power Dissipation	P_D	200	200	mW
Junction Temperature	T_j	150		°C
Storage Temperature Range	T_{stg}	-55~150		°C

Electrical Characteristics

Tamb=25°C, unless otherwise specified

Characteristic	Symbol	Test Condition	Min.	Typ.	Max.	Unit
Forward Voltage	$V_{F(1)}$	$I_F=1mA$	-	0.60	-	V
	$V_{F(2)}$	$I_F=10mA$	-	0.72	-	
	$V_{F(3)}$	$I_F=150mA$	-	-	1.25	
Reverse Current	I_R	$V_R=80V$	-	-	10	µA
Total Capacitance	C_T	$V_R=0, f=1MHz$	-	0.9	3.0	pF
Reverse Recovery Time	t_{rr}	$I_F=10mA$	-	1.6	4.0	nS

ELECTRICAL CHARACTERISTIC CURVES

($T_a = 25^\circ\text{C}$)

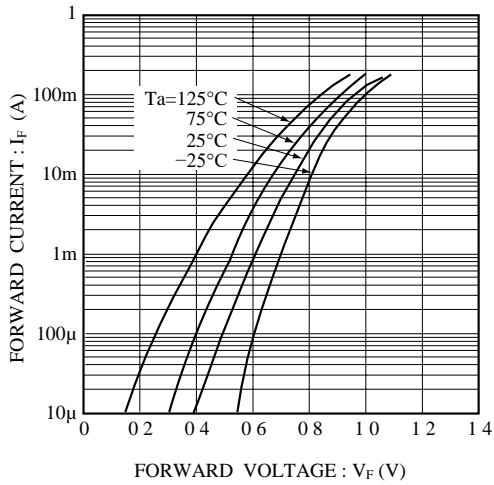


Fig.1 Forward characteristics

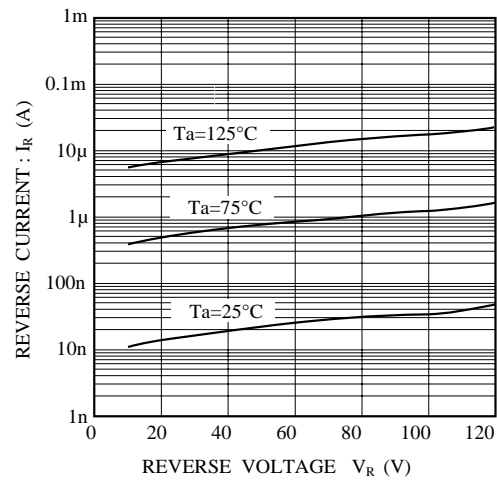


Fig.2 Reverse characteristics

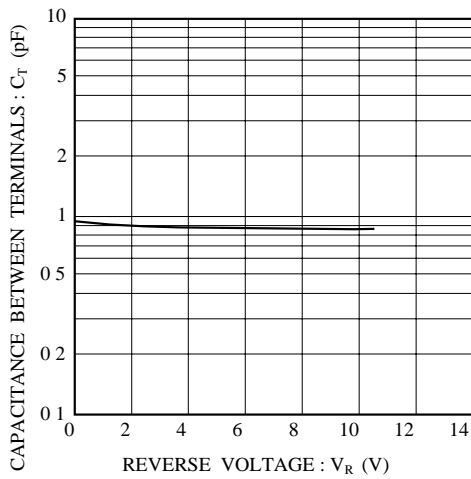


Fig.3 Capacitance between terminals characteristics

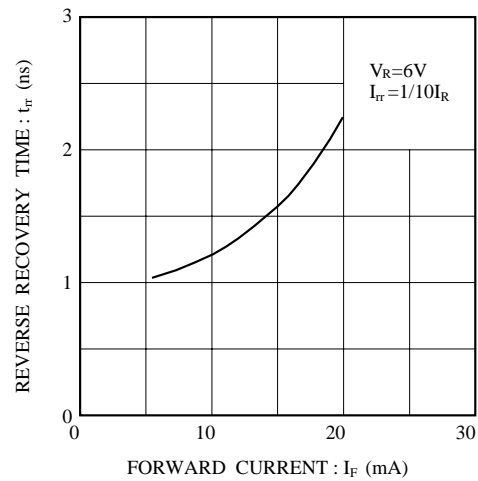


Fig.4 Reverse recovery time characteristics

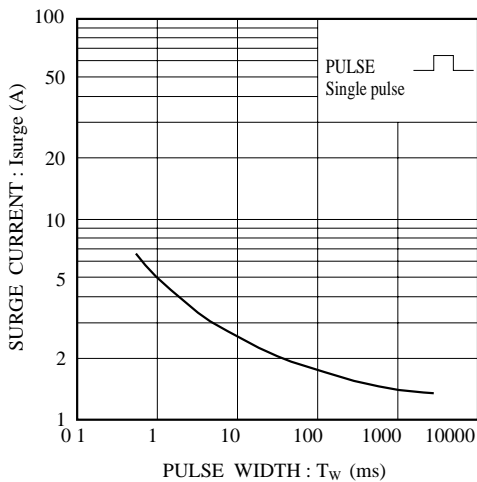


Fig.5 Surge current characteristics

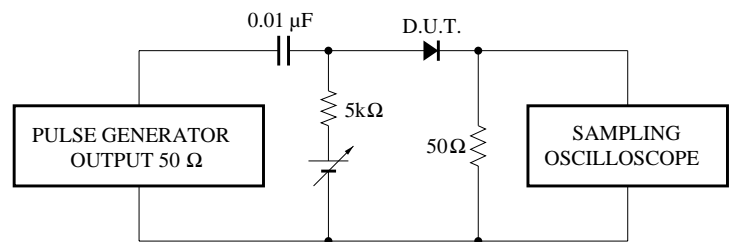


Fig.6 Reverse recovery time (t_{rr}) measurement circuit