

# BAV99W

**PRV : 85 Volts**

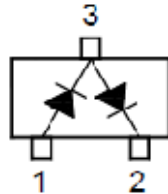
**Io : 150 mA**

**FEATURES :**

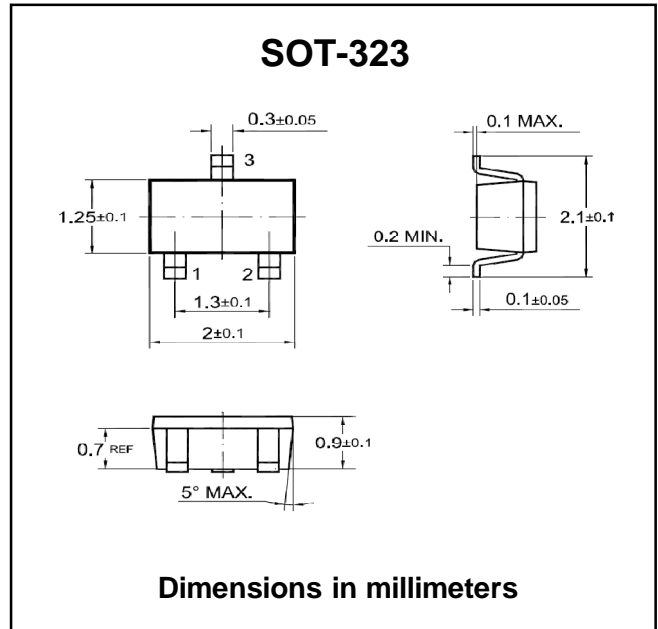
- \* Small plastic SMD package
- \* High switching speed : max. 4 ns
- \* Continuous reverse voltage : max.75 V
- \* Repetitive peak reverse voltage : max. 85 V
- \* Pb / RoHS Free

**MECHANICAL DATA :**

- \* Case : SOT-323 plastic Case
- \* Marking Code : A7



## HIGH SPEED DOUBLE DIODE



**ABSOLUTE MAXIMUM RATINGS (Ta = 25°C)**

Rating at 25 °C ambient temperature unless otherwise specified.

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	$V_{RRM}$	85	V
Reverse Voltage	$V_R$	75	V
Continuous Forward Current (Double Diode Loded)	$I_F$	130	mA
Continuous Forward Current (Single Diode Loded)	$I_F$	150	mA
Maximum Repetitive Peak Forward Current	$I_{FRM}$	500	mA
Maximum Non-repetitive Peak Forward Surge Current	$I_{FSM}$	$t = 1\mu s$	4.0
		$t = 1ms$	1
		$t = 1s$	0.5
Total Power Dissipation	$P_{tot}$	200	mW
Thermal Resistance Junction to Ambient	$R_{th j-a}$	625	°C/W
Junction Temperature Range	$T_J$	150	°C
Storage Temperature Range	$T_{STG}$	-55 to +150	°C

**ELECTRICAL CHARACTERISTICS (Ta = 25 °C)**

Parameter	Test Condition	Symbol	Max.	Unit
Forward Voltage	$I_F = 1\text{ mA}$	$V_F$	0.715	V
	$I_F = 10\text{ mA}$	$V_F$	0.855	
	$I_F = 50\text{ mA}$	$V_F$	1.0	
	$I_F = 150\text{ mA}$	$V_F$	1.25	
Reverse Current	$V_R = 25\text{ V}$	$I_R$	30	nA
	$V_R = 75\text{ V}$	$I_R$	1.0	µA
	$V_R = 25\text{ V} ; T_J = 150\text{ °C}$	$I_R$	30	µA
	$V_R = 75\text{ V} ; T_J = 150\text{ °C}$	$I_R$	50	µA
Diode Capacitance	$V_R = 0\text{ V}, f = 1\text{ MHz}$	$C_D$	1.5	pF
Reverse Recovery Time	$I_F = I_R = 10\text{ mA}$ $I_{rr} = 0.1 \times I_R, R_L = 100\ \Omega$	$T_{rr}$	4	ns

RATINGS AND CHARACTERISTIC CURVES ( BAV99W )

FIG.1 - MAXIMUM PERMISSIBLE CONTINUOUS FORWARD CURRENT AS A FUNCTION OF AMBIENT TEMPERATURE

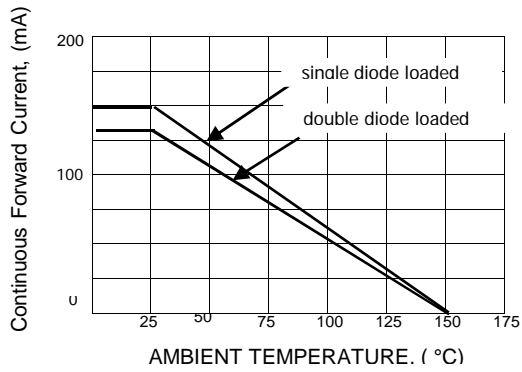


FIG.2 - DIODE CAPACITANCE VS. REVERSE VOLTAGE

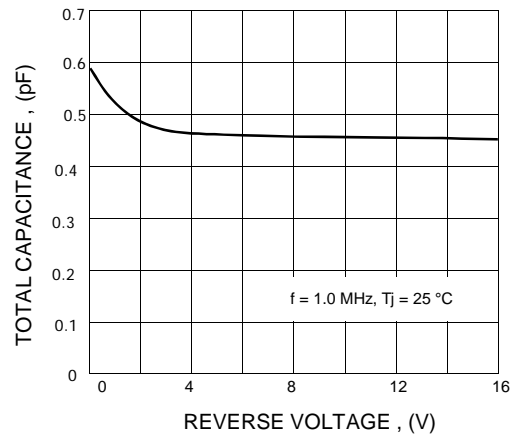


FIG.3 - FORWARD CURRENT AS A FUNCTION OF FORWARD VOLTAGE

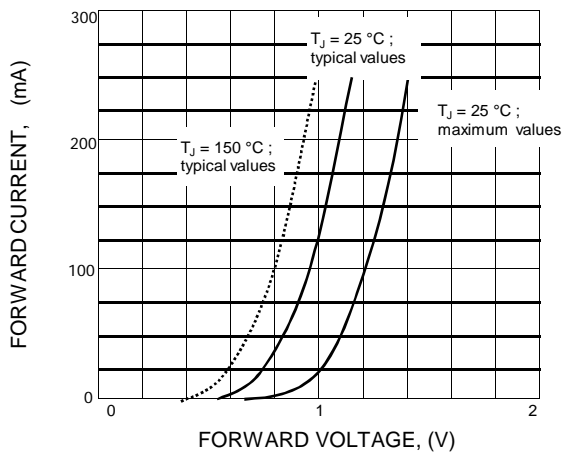


FIG.4 - REVERSE CURRENT AS A FUNCTION OF JUNCTION TEMPERATURE

