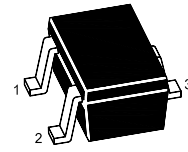
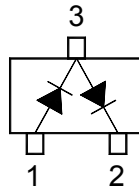


BAV99W

HIGH-SPEED DOUBLE SWITCHING DIODE



SOT-323 Plastic Package

Marking Code: **A7**

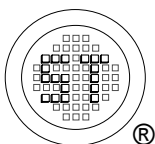
Absolute Maximum Ratings ($T_a = 25\text{ }^\circ\text{C}$)

Parameter	Symbol	Value	Unit
Repetitive Peak Reverse Voltage	V_{RRM}	85	V
Continuous Reverse Voltage	V_R	75	V
Continuous Forward Current	I_F	Single Diode Load ¹⁾	150
		Double Diode Load ¹⁾	130
Repetitive Peak Forward Current	I_{FRM}	500	mA
Non-repetitive Peak Forward Current Square Wave; $T_j = 25\text{ }^\circ\text{C}$ Prior to Surge	I_{FSM}	at $t = 1\text{ }\mu\text{s}$	4
		at $t = 1\text{ ms}$	1
		at $t = 1\text{ s}$	0.5
Total Power Dissipation	P_{tot}	200	mW
Junction Temperature	T_j	150	$^\circ\text{C}$
Storage Temperature Range	T_{stg}	-65 to +150	$^\circ\text{C}$
Thermal Resistance from Junction to Ambient ¹⁾	$R_{th\ j-a}$	625	K/W

¹⁾ Device mounted on an FR4 printed-circuit board.

Characteristics at $T_j = 25\text{ }^\circ\text{C}$

Parameter	Symbol	Max.	Unit
Forward Voltage at $I_F = 1\text{ mA}$ at $I_F = 10\text{ mA}$ at $I_F = 50\text{ mA}$ at $I_F = 150\text{ mA}$	V_F	0.715	V
		0.855	
		1	
		1.25	
Reverse Current at $V_R = 25\text{ V}$ at $V_R = 75\text{ V}$ at $V_R = 25\text{ V}$, $T_j = 150\text{ }^\circ\text{C}$ at $V_R = 75\text{ V}$, $T_j = 150\text{ }^\circ\text{C}$	I_R	30	nA
		1	μA
		30	μA
		50	μA
Diode Capacitance at $f = 1\text{ MHz}$; $V_R = 0$	C_d	1.5	pF
Reverse Recovery Time at $I_F = 10\text{ mA}$ to $I_R = 10\text{ mA}$, $R_L = 100\text{ }\Omega$; measured at $I_R = 1\text{ mA}$	t_{rr}	4	ns
Forward Recovery Voltage at $I_F = 10\text{ mA}$, $t_r = 20\text{ ns}$	V_{fr}	1.75	V



SEMTECH ELECTRONICS LTD.

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ISO/TS 16949 : 2002
Certificate No. 05103

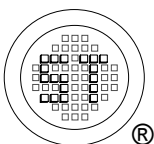
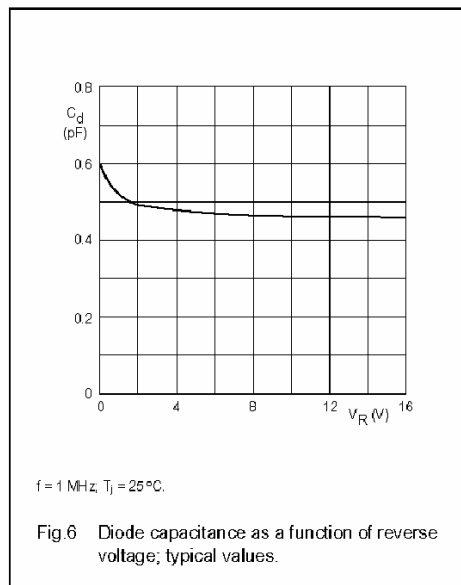
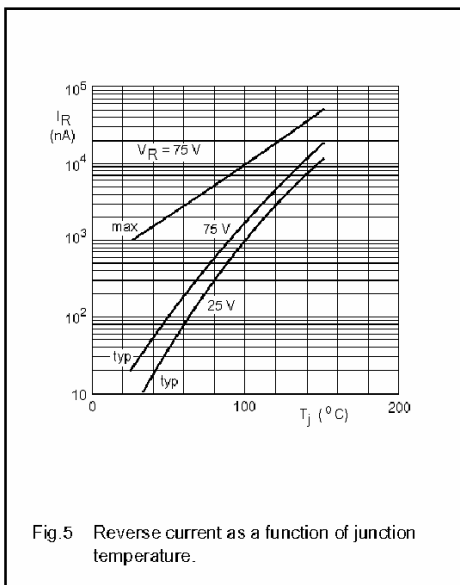
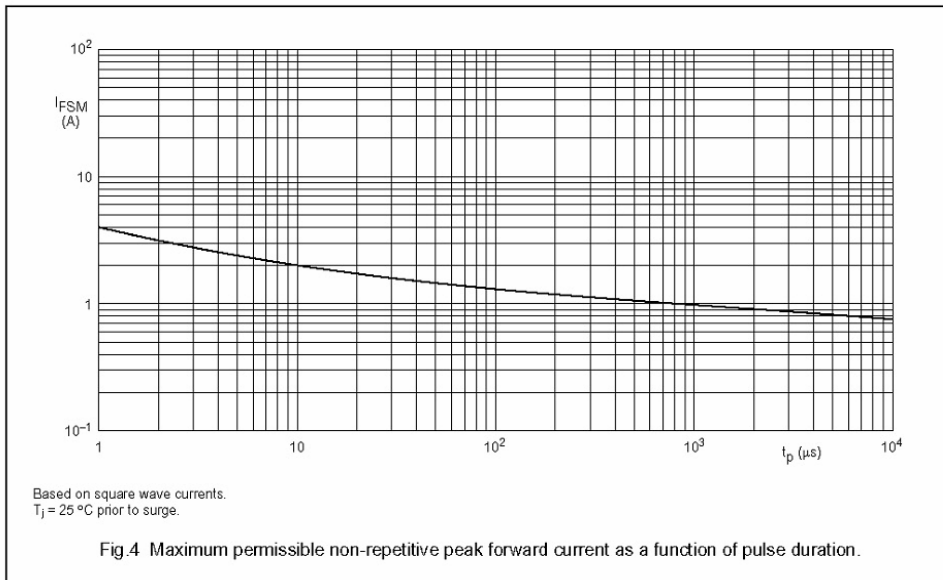
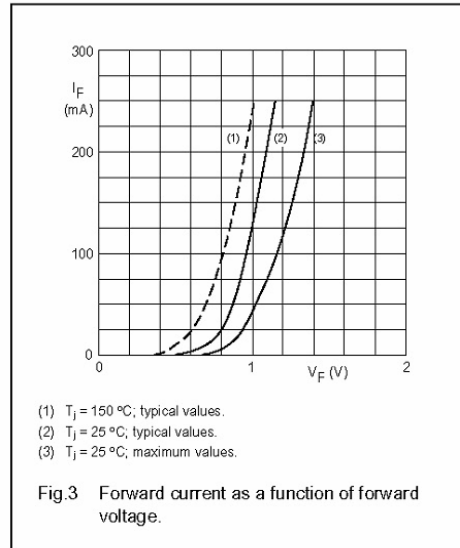
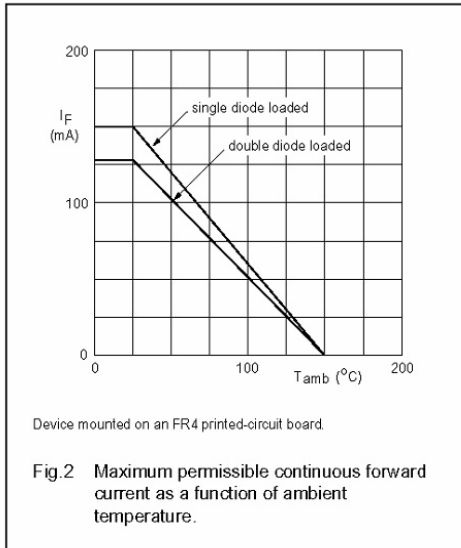


ISO 14001:2004
Certificate No. 7116



ISO 9001:2000
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Dated : 12/01/2006



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