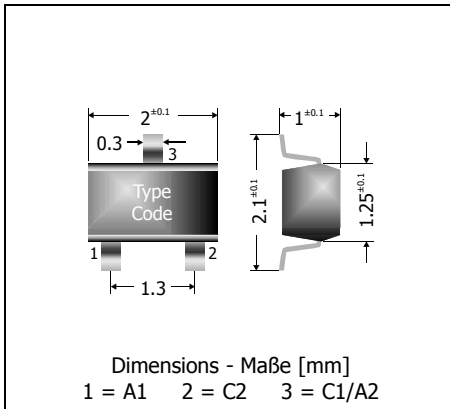



BAV99W

Surface Mount Small Signal Double-Diodes Kleinsignal-Doppel-Dioden für die Oberflächenmontage

Version 2006-07-11



Power dissipation – Verlustleistung	200 mW
Repetitive peak reverse voltage Periodische Spitzensperrspannung	70 V
Plastic case Kunststoffgehäuse	SOT-323
Weight approx. – Gewicht ca.	0.01 g
Plastic material has UL classification 94V-0 Gehäusematerial UL94V-0 klassifiziert	
Standard packaging taped and reeled Standard Lieferform gegurtet auf Rolle	

Maximum ratings (T_A = 25°C)

Grenzwerte (T_A = 25°C)

per diode / pro Diode		BAV99W	
Power dissipation – Verlustleistung ¹⁾	P _{tot}	200 mW ²⁾	
Max. average forward current – Dauergrenzstrom (dc)	I _{FAV}	200 mA ²⁾	
Repetitive peak forward current – Periodischer Spitzenstrom	I _{FRM}	300 mA ²⁾	
Non repetitive peak forward surge current Stoßstrom-Grenzwert	t _p ≤ 1 s	I _{FSM}	0.5 A
	t _p ≤ 1 ms	I _{FSM}	1 A
	t _p ≤ 1 μs	I _{FSM}	2 A
Repetitive peak reverse voltage – Periodische Spitzensperrspannung	V _{RRM}	85 V	
Reverse voltage – Sperrspannung (dc)	V _R	70 V	
Junction temperature – Sperrschichttemperatur	T _j	-55...+150°C	
Storage temperature – Lagerungstemperatur	T _S	-55...+150°C	

Characteristics (T_j = 25°C)

Kennwerte (T_j = 25°C)

Forward voltage Durchlass-Spannung	I _F = 1 mA	V _F	< 715 mV
	I _F = 10 mA	V _F	< 855 mV
	I _F = 50 mA	V _F	< 1.0 V
	I _F = 150 mA	V _F	< 1.25 V
Leakage current ³⁾ Sperrstrom	T _j = 25°C V _R = 25 V	I _R	< 30 nA
	T _j = 25°C V _R = 70 V	I _R	< 2.5 μA
	T _j = 150°C V _R = 25 V	I _R	< 30 μA
	T _j = 150°C V _R = 70 V	I _R	< 50 μA

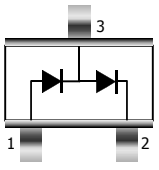
1 Total power dissipation of both diodes – Summe der Verlustleistungen beider Dioden

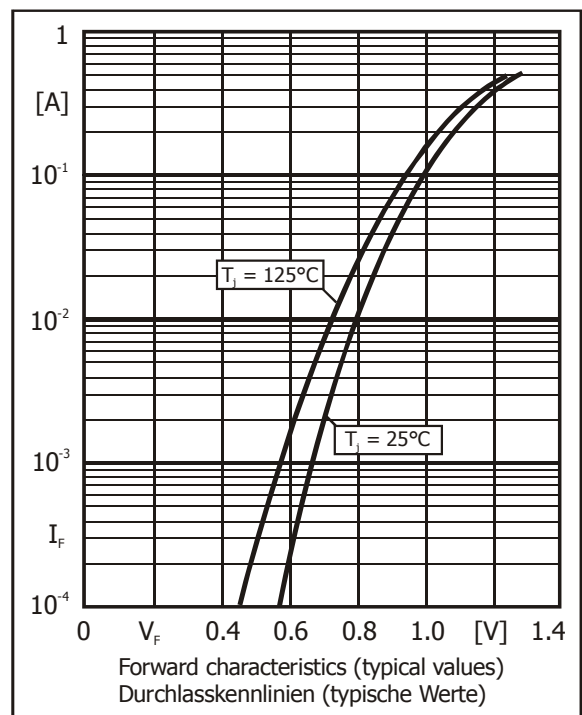
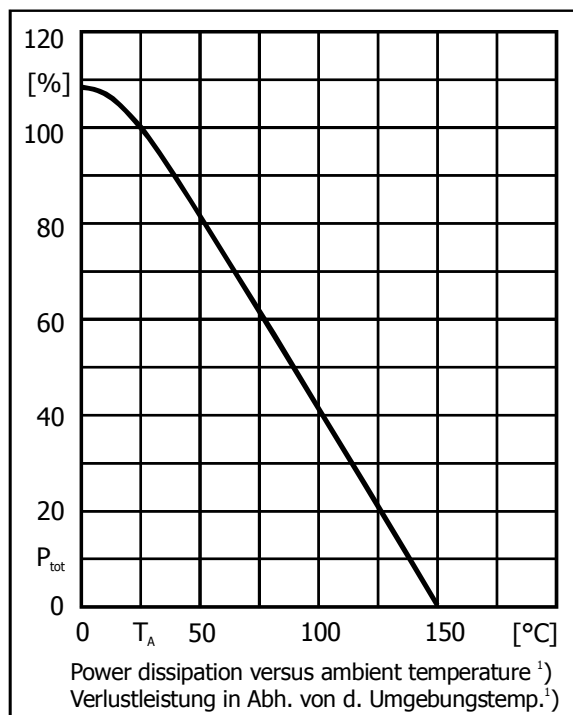
2 Mounted on P.C. board with 3 mm² copper pad at each terminal
Montage auf Leiterplatte mit 3 mm² Kupferbelag (Löt-pad) an jedem Anschluss

3 Tested with pulses t_p = 300 μs, duty cycle ≤ 2% – Gemessen mit Impulsen t_p = 300 μs, Schaltverhältnis ≤ 2%

Characteristics ($T_j = 25^\circ\text{C}$)
Kennwerte ($T_j = 25^\circ\text{C}$)

Max. junction capacitance – Max. Sperrschichtkapazität $V_R = 0\text{ V}, f = 1\text{ MHz}$	C_T	1.5 pF
Reverse recovery time – Sperrverzögerung $I_F = 10\text{ mA}$ über/through $I_R = 10\text{ mA}$ bis/to $I_R = 1\text{ mA}$	t_{rr}	< 4 ns
Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft	R_{thA}	< 620 K/W ¹⁾

Pinning – Anschlussbelegung	Marking – Stempelung
 <p>Double diode, series connection Doppeldiode, Reihenschaltung</p> <p>1 = A1 2 = C2 3 = C1/A2</p>	BAV99W = A7
Other available configurations – Andere lieferbare Konfigurationen	
Single diode – einzelne Diode	BAL99
Double diode, common cathode – Doppeldiode, gemeinsame Kathode	BAV70
Double diode, common anode – Doppeldiode, gemeinsame Anode	BAW56



1 Mounted on P.C. board with 3 mm² copper pad at each terminal
Montage auf Leiterplatte mit 3 mm² Kupferbelag (Löt-pad) an jedem Anschluss