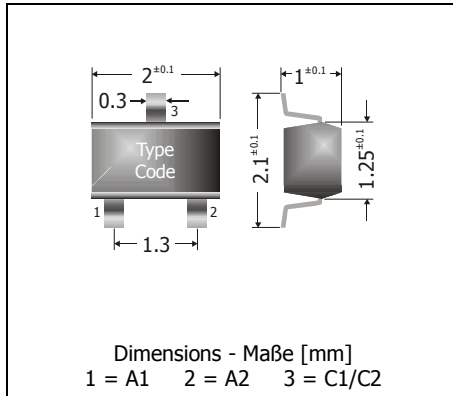


BAV70W

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

Version 2009-09-28



Power dissipation Verlustleistung	200 mW
Repetitive peak reverse voltage Periodische Spitzensperrspannung	75 V
Plastic case Kunststoffgehäuse	SOT-323
Weight approx. – Gewicht ca.	0.01 g
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	BAV70W
Power dissipation – Verlustleistung ¹⁾		P _{tot}	200 mW ¹⁾
Max. average forward current (dc) Dauergrenzstrom		I _{FAV} I _{FAV}	175 mA ²⁾ 100mA ^{1) 2)}
Repetitive peak forward current Periodischer Spitzenstrom		I _{FRM}	300 mA ²⁾
Non repetitive peak forward surge current Stoßstrom-Grenzwert	t _p ≤ 1 s t _p ≤ 1 ms t _p ≤ 1 μs	I _{FSM} I _{FSM} I _{FSM}	0.5 A 1 A 2 A
Repetitive peak reverse voltage Periodische Spitzensperrspannung		V _{RRM}	75 V
Max. operating junction temperature – Max. Sperrschichttemperatur		T _j	150°C
Storage temperature – Lagerungstemperatur		T _S	- 55...+ 150°C

Characteristics (T_j = 25°C)

Kennwerte (T_j = 25°C)

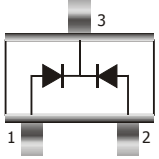
Forward voltage Durchlass-Spannung		I _F = 1 mA I _F = 10 mA I _F = 50 mA I _F = 150 mA	V _F V _F V _F V _F	< 715 mV < 855 mV < 1.0 V < 1.25 V
Leakage current ³⁾ Sperrstrom	V _R = 75 V	T _j = 25°C	I _R	< 5 μA
	V _R = 25 V V _R = 75 V	T _j = 150°C	I _R I _R	< 60 μA < 100 μA

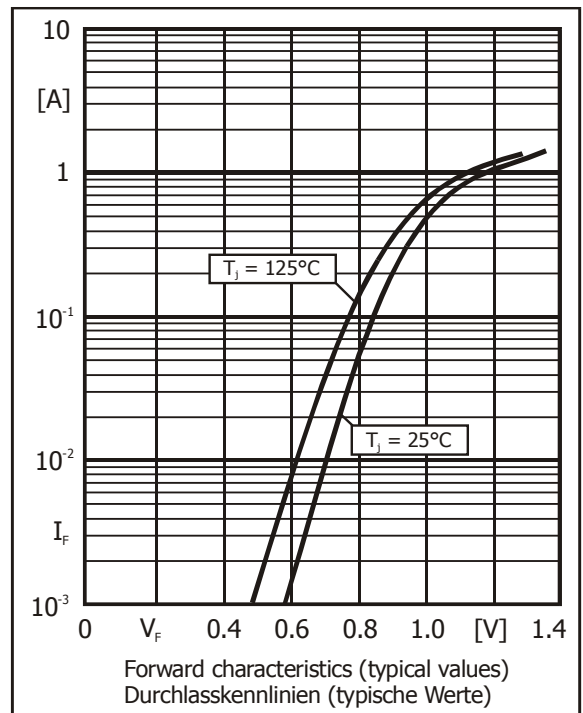
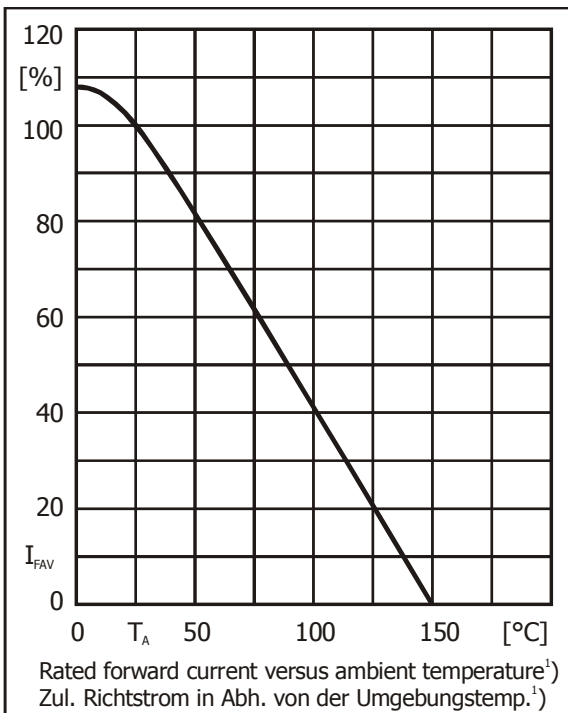
1 Both diodes loaded – Beide Dioden belastet

2 Mounted on P.C. board with 3 mm² copper pad at each terminal
Montage auf Leiterplatte mit 3 mm² Kupferbelag (Lötpad) 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	2 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}	< 625 K/W ¹⁾

Outline – Gehäuse	Pinning – Anschlussbelegung	Marking – Stempelung
	Double diode, common cathode Doppeldiode, gemeins. Kathode 1 = A1 2 = A2 3 = C1/C2	BAV70W = A4 or /oder = KJA or /oder = PH



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