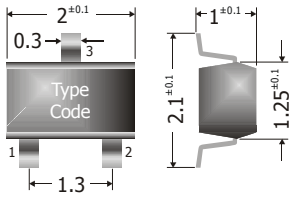
BAV70W

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

Version 2009-09-28



Dimensions - Maße [mm]
1 = A1 2 = A2 3 = C1/C2

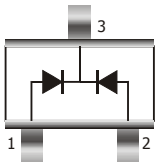
Power dissipation Verlustleistung	200 mW
Repetitive peak reverse voltage Periodische Spitzensperrspannung	75 V
Plastic case Kunststoffgehäuse	SOT-323
Weight approx. – Gewicht ca.	0.01 g
Standard packaging taped and reeled Standard Lieferform gegurtet auf Rolle	

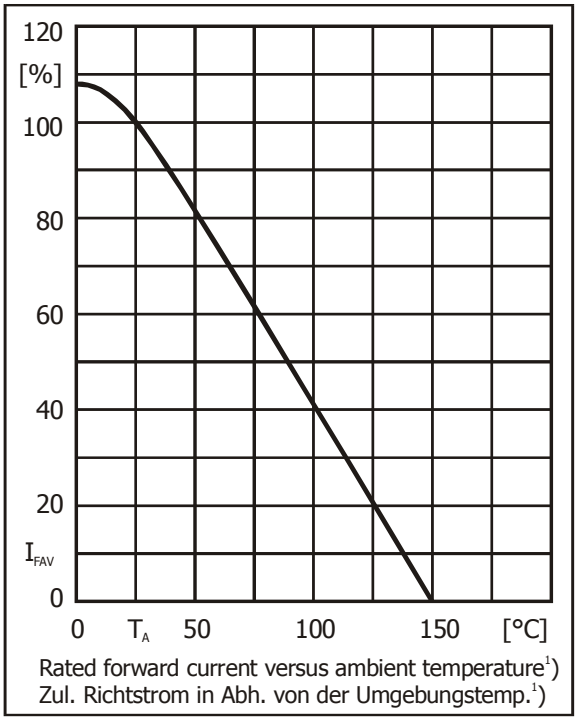
Maximum ratings (T_A = 25°C)		**Grenzwerte (T_A = 25°C)**	
		per diode / pro Diode	**BAV70W**
Power dissipation – Verlustleistung [1]		P_{tot}	200 mW [1]
Max. average forward current (dc) Dauergrenzstrom		I_{FAV} I_{FAV}	175 mA [2] 100mA [1] [2]
Repetitive peak forward current Periodischer Spitzenstrom		I_{FRM}	300 mA [2]
Non repetitive peak forward surge current Stoßstrom-Grenzwert	$t_p \le 1$ s $t_p \le 1$ ms $t_p \le 1$ 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

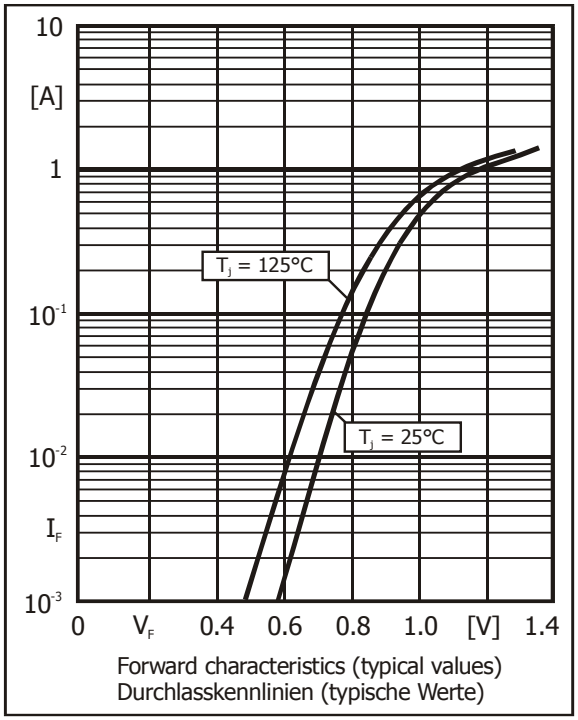
1 Both diodes loaded – Beide Dioden belastet
2 Mounted on P.C. board with 3 mm² copper pad at each terminal
Montage auf Leiterplatte mit 3 mm² Kupferbelag (Lötpad) an jedem Anschluss
3 Tested with pulses t_p = 300 µs, duty cycle ≤ 2% – Gemessen mit Impulsen t_p = 300 µs, Schaltverhältnis ≤ 2%

Characteristics (T_j = 25°C)		**Kennwerte (T_j = 25°C)**
Max. junction capacitance – Max. Sperrschichtkapazität V_R = 0 V, f = 1 MHz	C_T	2 pF
Reverse recovery time – Sperrverzug I_F = 10 mA über/through I_R = 10 mA bis/to I_R = 1 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



Rated forward current versus ambient temperature[1])
Zul. Richtstrom in Abh. von der Umgebungstemp.[1])



Forward characteristics (typical values)
Durchlasskennlinien (typische Werte)

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