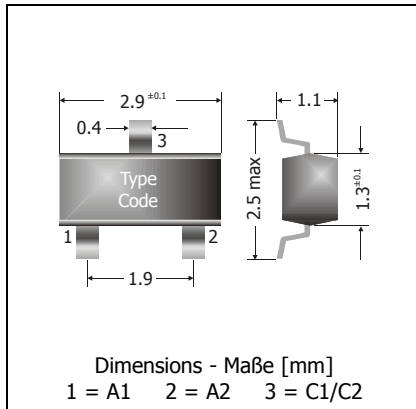


BAV70
Surface Mount Small Signal Double-Diodes
Kleinsignal-Doppel-Dioden für die Oberflächenmontage

Version 2005-9-28



Power dissipation – Verlustleistung

310 mW

 Repetitive peak reverse voltage
 Periodische Spitzensperrspannung

70 V

 Plastic case
 Kunststoffgehäuse

 SOT-23
 (TO-236)

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		BAV70	
Power dissipation – Verlustleistung ¹⁾		P _{tot}	310 mW ²⁾
Max. average forward current (dc) Dauergrenzstrom		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}	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	< 5 µA
	T _j = 150°C	V _R = 25 V	I _R	< 60 µA
		V _R = 70 V	I _R	< 100 µA

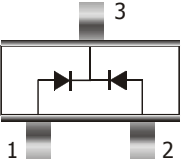
1 Total power dissipation of both diodes – Summe der Verlustleistungen beider Dioden

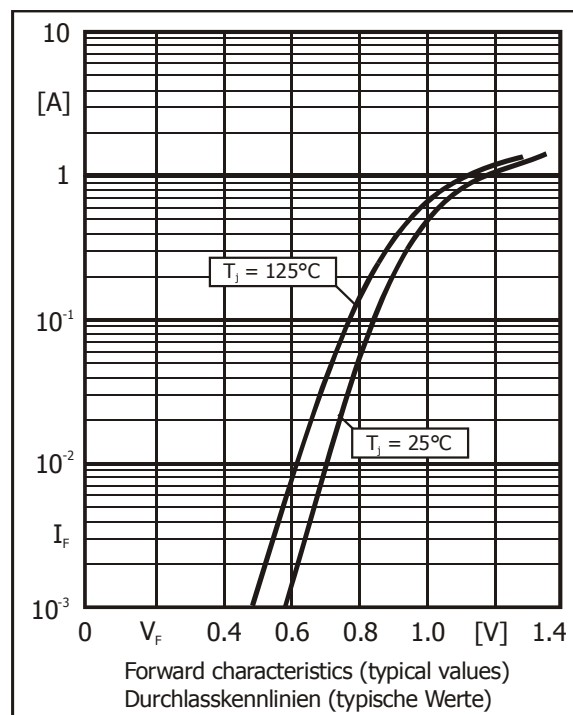
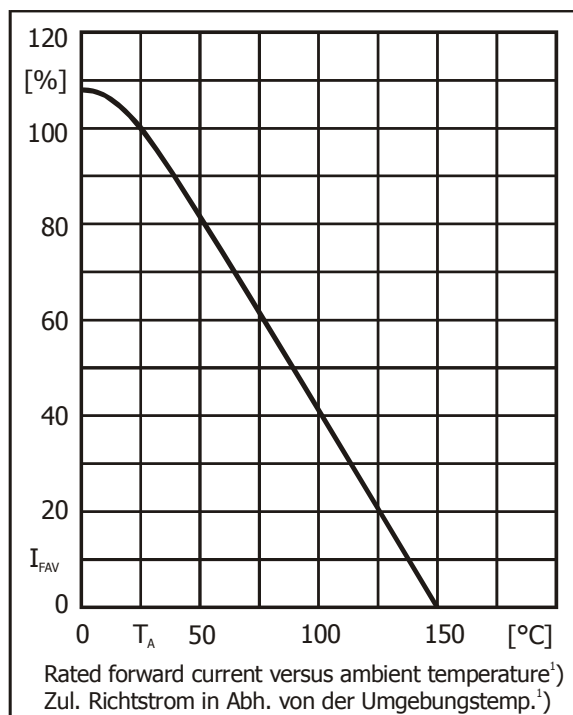
2 Mounted on P.C. board with 3 mm² copper pad at each terminal
 Montage auf Leiterplatte mit 3 mm² Kupferbelag (Lötpad) an jedem Anschluss

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	1.5 pF
Reverse recovery time – Sperrverzug $I_F = 10\text{ mA}$ über/through $I_R = 10\text{ mA}$ bis/to $I_R = 1\text{ mA}$	t_{rr}	< 6 ns
Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft	R_{thA}	< 420 K/W ¹⁾

Pinning – Anschlussbelegung		Marking – Stempelung
 Double diode, common cathode Doppeldiode, gemeinsame Kathode 1 = A1 2 = A2 3 = C1/C2		BAV70 = A4



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