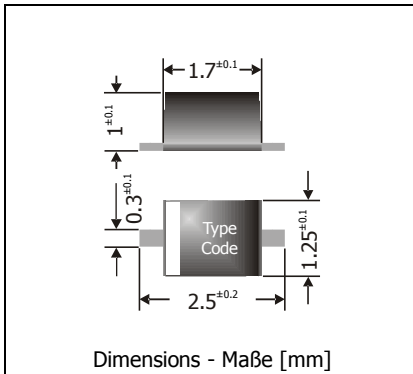


## BAV19WS...BAV21WS

### Surface Mount Small Signal Diodes Kleinsignal-Dioden für die Oberflächenmontage

Version 2011-09-27



Power dissipation – Verlustleistung	200 mW
Repetitive peak reverse voltage Periodische Spitzensperrspannung	120...250 V
Plastic case – Kunststoffgehäuse	~ SOD-323
Weight approx. – Gewicht ca.	0.005 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<sub>A</sub> = 25° C)

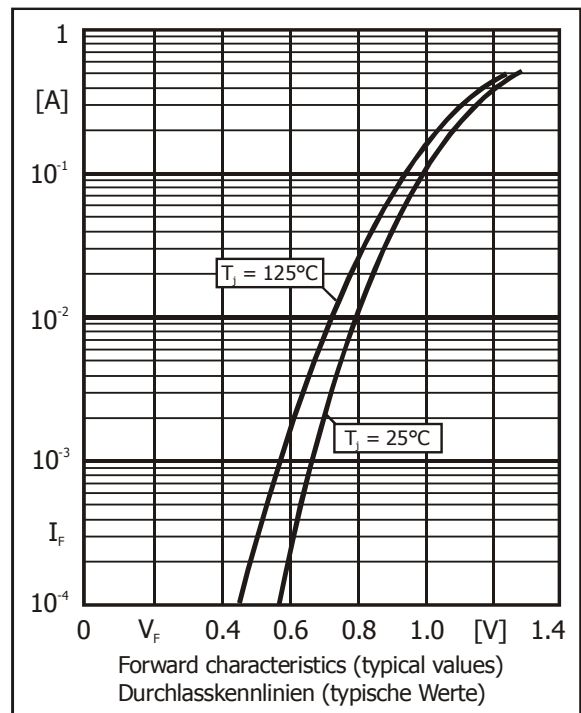
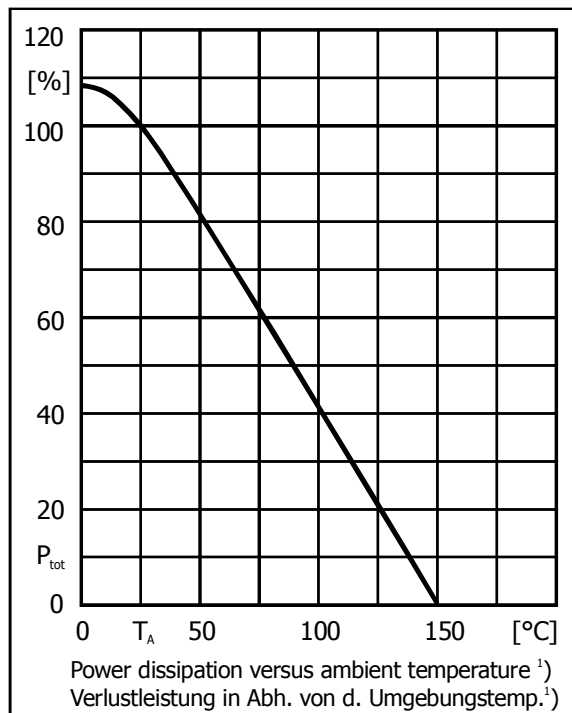
#### Grenzwerte (T<sub>A</sub> = 25° C)

		BAV19WS, BAV20WS, BAV21WS	
Power dissipation – Verlustleistung	P <sub>tot</sub>		200 mW <sup>1)</sup>
Max. average forward current – Dauergrenzstrom (dc)	I <sub>FAV</sub>		200 mA <sup>1)</sup>
Repetitive peak forward current – Periodischer Spitzenstrom	I <sub>FRM</sub>		625 mA <sup>1)</sup>
Non repetitive peak forward surge current Stoßstrom-Grenzwert	t <sub>p</sub> ≤ 1 s t <sub>p</sub> ≤ 1 μs	I <sub>FSM</sub> I <sub>FSM</sub>	0.5 A 2.5 A
Repetitive peak reverse voltage Periodische Spitzensperrspannung	BAV19WS BAV20WS BAV21WS	V <sub>RRM</sub> V <sub>RRM</sub> V <sub>RRM</sub>	120 V 200 V 250 V
Continuous reverse voltage Sperrspannung	BAV19WS BAV20WS BAV21WS	V <sub>R</sub> V <sub>R</sub> V <sub>R</sub>	100 V 150 V 200 V
Junction temperature – Sperrschichttemperatur	T <sub>j</sub>		+150° C
Storage temperature – Lagerungstemperatur	T <sub>s</sub>		- 55...+150° C

<sup>1</sup> Mounted on P.C. board with 3 mm<sup>2</sup> copper pad at each terminal  
Montage auf Leiterplatte mit 3 mm<sup>2</sup> Kupferbelag (Löt-pad) an jedem Anschluss

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

Forward voltage <sup>1)</sup> Durchlass-Spannung	$I_F = 100 \text{ mA}$ $I_F = 200 \text{ mA}$	$V_F$ $V_F$	< 1 V < 1.25 V
Leakage current <sup>1)</sup> Sperrstrom	$T_j = 25^\circ \text{C}$ BAV19WS BAV20WS BAV21WS	$V_R = 100 \text{ V}$ $V_R = 150 \text{ V}$ $V_R = 200 \text{ V}$	$I_R$ < 100 nA
Max. junction capacitance – Max. Sperrschichtkapazität $V_R = 0 \text{ V}, f = 1 \text{ MHz}$		$C_T$	< 5 pF
Reverse recovery time – Sperrverzug $I_F = 30 \text{ mA}$ über/ through $I_R = 30 \text{ mA}$ bis / to $I_R = 1 \text{ mA}$		$t_{rr}$	< 50 ns
Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft		$R_{thA}$	< 625 K/W <sup>2</sup>
Marking – Stempelung	BAV19WS BAV20WS BAV21WS		WO



- 1 Tested with pulses  $t_p = 300 \mu\text{s}$ , duty cycles  $\leq 2\%$   
gemessen mit Impulsen  $t_p = 300 \mu\text{s}$ , Schaltverhältnis  $\leq 2\%$
- 2 Mounted on P.C. board with 3 mm<sup>2</sup> copper pad at each terminal  
Montage auf Leiterplatte mit 3 mm<sup>2</sup> Kupferbelag (Löt-pad) an jedem Anschluss