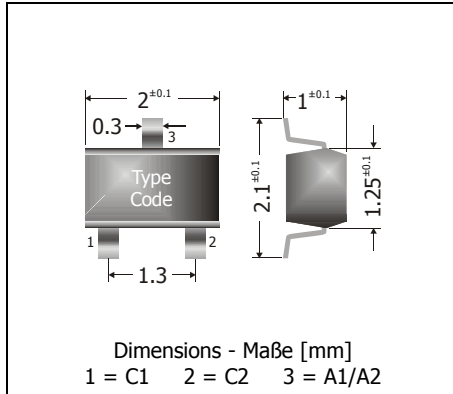


## BAW56W

### Fast Switching Surface Mount Si-Planar Double Diodes Schnelle Si-Planar Doppel-Dioden für die Oberflächenmontage

Version 2006-03-29



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 <sub>A</sub> = 25°C)	Grenzwerte (T <sub>A</sub> = 25°C)	
	per diode / pro Diode	BAW56
Power dissipation – Verlustleistung <sup>1)</sup>	P <sub>tot</sub>	200 mW <sup>2)</sup>
Max. average forward current (dc) Dauergrenzstrom	I <sub>FAV</sub>	150 mA <sup>2)</sup>
Repetitive peak forward current Periodischer Spitzenstrom	I <sub>FRM</sub>	450 mA <sup>2)</sup>
Non repetitive peak forward surge current Stoßstrom-Grenzwert	t <sub>p</sub> ≤ 1 s t <sub>p</sub> ≤ 1 ms t <sub>p</sub> ≤ 1 µs	I <sub>FSM</sub> 0.5 A I <sub>FSM</sub> 1 A I <sub>FSM</sub> 2 A
Repetitive peak reverse voltage Periodische Spitzensperrspannung	V <sub>R RM</sub>	75 V
Junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur	T <sub>j</sub> T <sub>S</sub>	-55...+150°C -55...+150°C

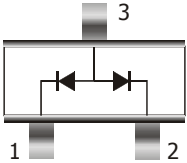
Characteristics (T <sub>j</sub> = 25°C)	Kennwerte (T <sub>j</sub> = 25°C)		
Forward voltage Durchlass-Spannung	I <sub>F</sub> = 1 mA I <sub>F</sub> = 10 mA I <sub>F</sub> = 50 mA I <sub>F</sub> = 150 mA	V <sub>F</sub> V <sub>F</sub> V <sub>F</sub> V <sub>F</sub>	< 715 mV < 855 mV < 1.00 V < 1.25 V
Leakage current <sup>3)</sup> Sperrstrom	T <sub>j</sub> = 25°C T <sub>j</sub> = 150°C	V <sub>R</sub> = V <sub>R RM</sub> V <sub>R</sub> = 25 V V <sub>R</sub> = V <sub>R RM</sub>	I <sub>R</sub> I <sub>R</sub> I <sub>R</sub>
			< 2.5 µA < 30 µA < 50 µA

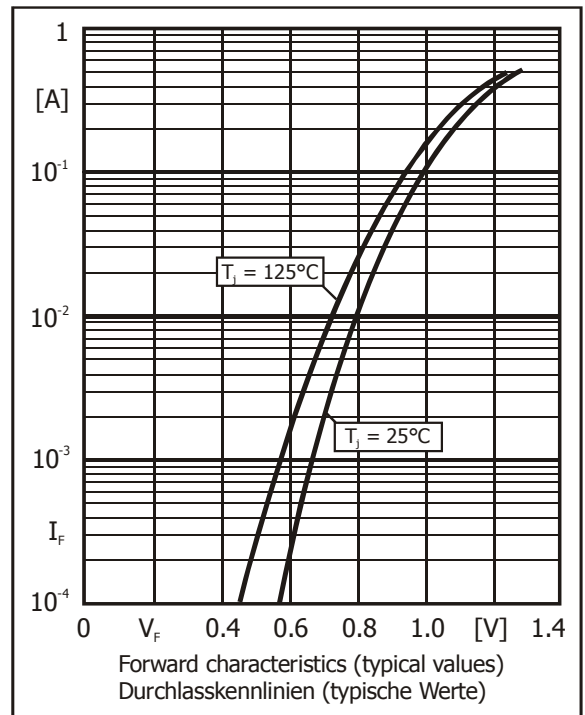
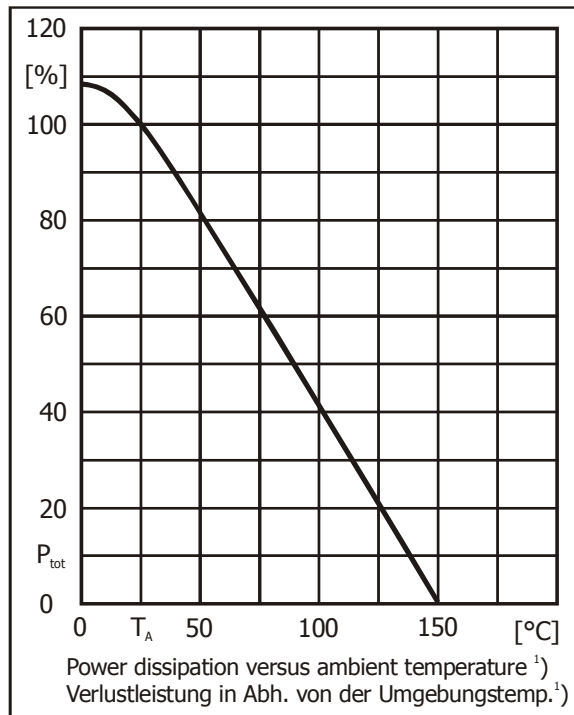
<sup>1</sup> Total power dissipation of both diodes – Summe der Verlustleistungen beider Dioden

<sup>2</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 (Lötpad) an jedem Anschluss

<sup>3</sup> Tested with pulses t<sub>p</sub> = 300 µs, duty cycle ≤ 2% – Gemessen mit Impulsen t<sub>p</sub> = 300 µs, Schaltverhältnis ≤ 2%

Characteristics (T <sub>j</sub> = 25°C)	Kennwerte (T <sub>j</sub> = 25°C)	
Max. junction capacitance – Max. Sperrschichtkapazität V <sub>R</sub> = 0 V, f = 1 MHz	C <sub>T</sub>	2 pF
Reverse recovery time – Sperrverzögerung I <sub>F</sub> = 10 mA über/through I <sub>R</sub> = 10 mA bis/to I <sub>R</sub> = 1 mA	t <sub>rr</sub>	< 4 ns
Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft	R <sub>thA</sub>	< 620 K/W <sup>1)</sup>

Outline – Gehäuse	Pinning – Anschlussbelegung	Marking – Stempelung
	Dual diode, common anode Doppeldiode, gemeinsame Anode  1 = C1    2 = C2    3 = A1/A2	BAW56W = KJC



1 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 (Lötpad) an jedem Anschluss