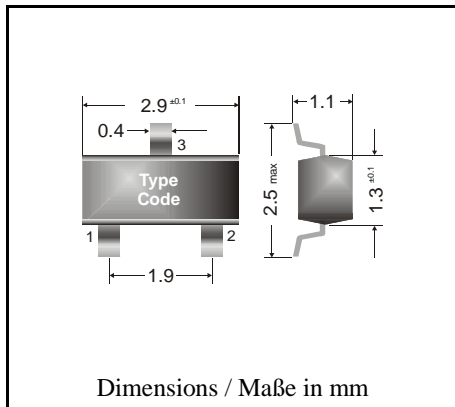


Surface mount Schottky-Barrier Single-/ Double-Diodes
Schottky-Barrier Einzel-/ Doppel-Dioden für die Oberflächenmontage

Version 2004-04-09



Power dissipation – Verlustleistung	310 mW
Repetitive peak reverse voltage Periodische Spitzensperrspannung	40 V
Plastic case Kunststoffgehäuse	SOT-23 (TO-236)
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		BAS40-series
Power dissipation – Verlustleistung	P _{tot}	310 mW ¹⁾
Max. average forward current (dc) Dauergrenzstrom	I _{FAV}	200 mA ¹⁾
Repetitive peak forward current Periodischer Spitzenstrom	I _{FRM}	300 mA ¹⁾
Peak forward surge current t _p # 1 s Stoßstrom-Grenzwert	I _{FSM}	600 mA
Repetitive peak reverse voltage Periodische Spitzensperrspannung	V _{RRM}	40 V
Junction temperature – 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 - Durchlaßspannung ²⁾	I _F = 1 mA	V _F	< 380 mV
	I _F = 10 mA	V _F	< 500 mV
	I _F = 40 mA	V _F	< 1000 mV
Leakage current - Sperrstrom ²⁾	V _R = 30 V	I _R	< 200 nA
	V _R = 40 V	I _R	< 10 : A

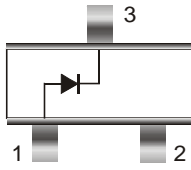
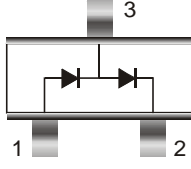
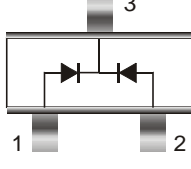
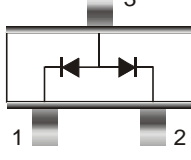
¹⁾ Mounted on P.C. board with 3 mm² copper pad at each terminal

Montage auf Leiterplatte mit 3 mm² Kupferbelag (Löt-pad) an jedem Anschluß

²⁾ Tested with pulses t_p = 300 : s, duty cycle # 2% – Gemessen mit Impulsen t_p = 300 : s, Schaltverhältnis # 2%

Characteristics ($T_j = 25/C$)Kennwerte ($T_j = 25/C$)

Max. junction Capacitance – Max. Sperrschichtkapazität $V_R = 0 \text{ V}, f = 1 \text{ MHz}$	C_T	5 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}	< 5 ns
Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft	R_{thA}	400 K/W ³⁾

Outline – Gehäuse	Pinning – Anschlußbelegung	Marking – Stempelung
	Single diode – Einzeldiode 1 = A 2 = n.c. 3 = K	BAS40 = 43
	Double diode, series connect. Doppeldiode, Reihenschaltung 1 = A1 2 = K2 3 = K1 / A2	BAS40-04 = 44
	Double diode, common cathode Doppeldiode, gemeins. Katode 1 = A1 2 = A2 3 = K1 / K2	BAS40-05 = 45
	Double diode, common anode Doppeldiode, gemeins. Anode 1 = K1 2 = K2 3 = A1 / A2	BAS40-06 = 46

³⁾ 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