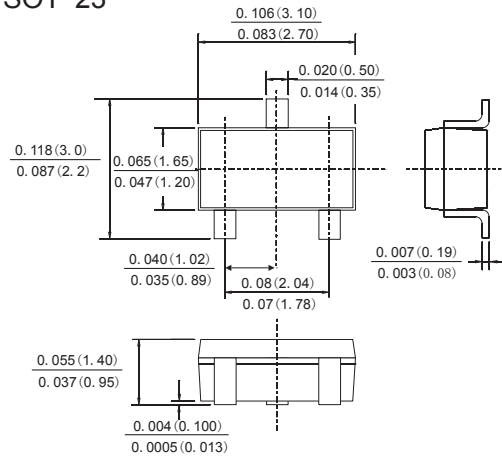


SCHOTTKY BARRIER RECTIFIER
VOLTAGE RANGE: 40 V
CURRENT: 0.2 A

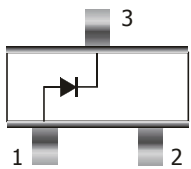
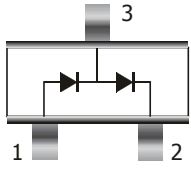
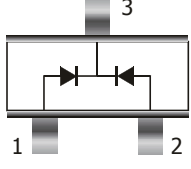
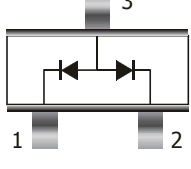
Power dissipation – Verlustleistung 310 mW
 Repetitive peak reverse voltage 40 V
 Periodische Spitzensperrspannung
 Plastic case SOT-23
 Kunststoffgehäuse (TO-236)
 Weight approx. – Gewicht ca. 0.01 g
 Plastic material has UL classification 94V-0
 Gehäusematerial UL94V-0 klassifiziert
 Standard packaging taped and reeled
 Standard Lieferform gegurtet auf Rolle

SOT-23


MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25 °C ambient temperature unless otherwise specified.

per diode / pro Diode		BAS40-series	
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	$t_p \leq 1 \text{ s}$	I_{FSM}	0.6 A
Repetitive peak reverse voltage Periodische Spitzensperrspannung		V_{RRM}	40 V
Junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur		T_j T_s	-55...+150°C -55...+150°C
Forward voltage ³⁾ Durchlass-Spannung ³⁾	$I_F = 1 \text{ mA}$ $I_F = 10 \text{ mA}$ $I_F = 40 \text{ mA}$	V_F V_F V_F	< 380 mV < 500 mV < 1.00 V
Leakage current Sperrstrom	$V_R = 30 \text{ V}$ $V_R = 40 \text{ V}$	I_R I_R	< 200 nA < 10 µA
Max. junction capacitance – Max. Sperrschichtkapazität $V_R = 0 \text{ V}, f = 1 \text{ MHz}$		C_T	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}	< 5 ns
Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft		R_{thA}	< 400 K/W ²⁾

Pinning – Anschlussbelegung		Marking – Stempelung
	<p>Single Diode Einzeldiode</p> <p>1 = A 2 = n.c./frei 3 = C</p>	BAS40 = 43
	<p>Dual diode, series connection Doppeldiode, Reihenschaltung</p> <p>1 = A1 2 = C2 3 = C1/A2</p>	BAS40-04 = 44
	<p>Dual diode, common cathode Doppeldiode, gemeinsame Katode</p> <p>1 = A1 2 = A2 3 = C1/C2</p>	BAS40-05 = 45
	<p>Dual diode, common anode Doppeldiode, gemeinsame Anode</p> <p>1 = C1 2 = C2 3 = A1/A2</p>	BAS40-06 = 46

