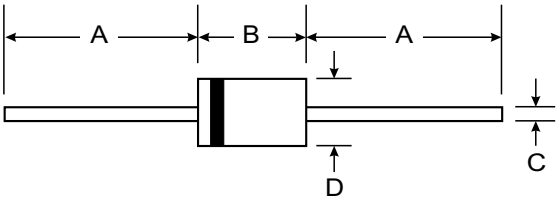
BAT85S

200mA Surface Mount Schottky Barrier Diodes

Features

- Integrated protection ring against static discharge
- Very low forward voltage
- Lead (Pb)-free component
- Component in accordance to RoHS 2002/95/EC and WEEE 2002/96/EC



DO-35		
Dim	**Min**	**Max**
A	25.40	—
B	—	4.00
C	—	0.60
D	—	2.00
All Dimensions in mm		

Mechanical Data

- **Case:** DO35 Glass case
- **Weight:** approx. 125 mg
- **Cathode Band Color:** black
- **Packaging Codes/Options:**

  TR/10 k per 13" reel (52 mm tape), 50 k/box

  TAP/10 k per Ammopack (52 mm tape), 50 k/box

Maximum Ratings and Electrical Characteristics

@ T_A = 25°C unless otherwise specified

Parameter	Test condition	Symbol	Value	Unit
Reverse voltage		V_R	30	V
Peak forward surge current	$t_p \leq 10$ ms	I_{FSM}	5	A
Repetitive peak forward current	$t_p \leq 1$ s	I_{FRM}	300	mA
Forward continuous current		I_F	200	mA
Average forward current	PCB mounting, l = 4 mm; V_{RWM} = 25 V, T_{amb} = 50 °C	I_{FAV}	200	mA

Parameter	Test condition	Symbol	Min	Typ.	Max	Unit
Forward voltage	I_F = 0.1 mA	V_F			240	mV
	I_F = 1 mA	V_F			320	mV
	I_F = 10 mA	V_F			400	mV
	I_F = 30 mA	V_F			500	mV
	I_F = 100 mA	V_F			800	mV
Reverse current	V_R = 25 V	I_R			2	µA
Diode capacitance	V_R = 1 V, f = 1 MHz	C_D			10	pF
Reverse Recovery Time	I_F = 10 mA to I_R = 10 mA to i_R = 1 mA	t_{rr}			5	ns

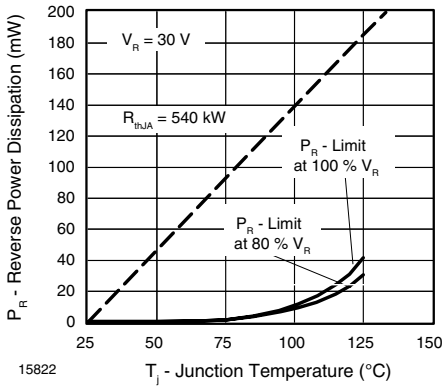


Figure 1. Max. Reverse Power Dissipation vs. Junction Temperature

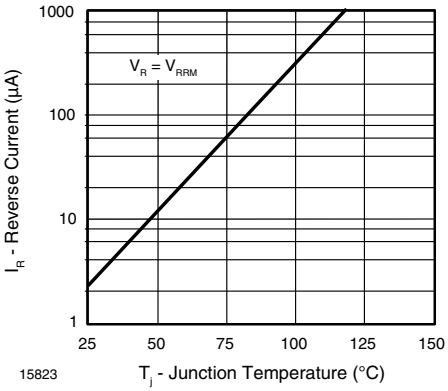


Figure 2. Reverse Current vs. Junction Temperature

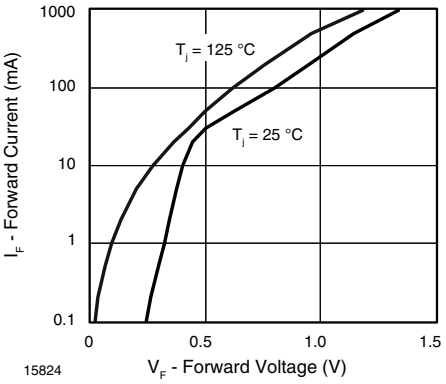


Figure 3. Forward Current vs. Forward Voltage

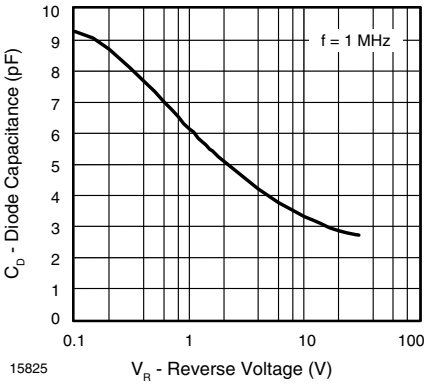


Figure 4. Diode Capacitance vs. Reverse Voltage