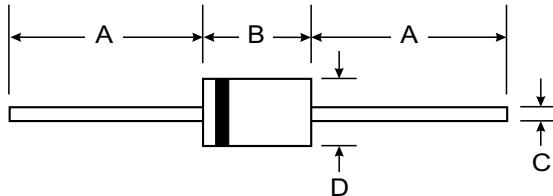


Features

- Integrated protection ring against static discharge
- Low capacitance
- Low leakage current
- Low forward voltage drop
- Very low switching time
- 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@ $T_A = 25^\circ\text{C}$ unless otherwise specified

Parameter	Test condition	Part	Symbol	Value	Unit
Reverse voltage		BAT81S	V_R	40	V
		BAT82S	V_R	50	V
		BAT83S	V_R	60	V
Forward continuous current			I_F	30	mA
Peak forward surge current	$t_p \leq 10 \text{ ms}$		I_{FSM}	500	mA
Repetitive peak forward current	$t_p \leq 1 \text{ s}$		I_{FRM}	150	mA
Parameter	Test condition	Symbol	Min	Typ.	Max
Forward voltage	$I_F = 0.1 \text{ mA}$	V_F			330 mV
	$I_F = 1 \text{ mA}$	V_F			410 mV
	$I_F = 15 \text{ mA}$	V_F			1000 mV
Reverse current	$V_R = V_{Rmax}$	I_R			200 nA
Diode capacitance	$V_R = 1 \text{ V}, f = 1 \text{ MHz}$	C_D			1.6 pF

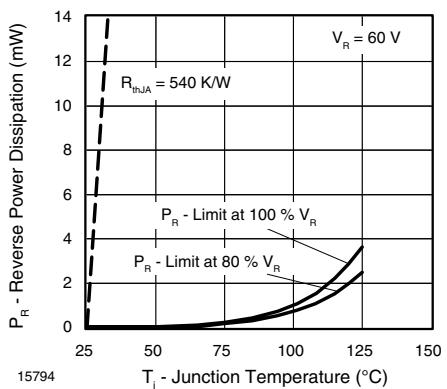


Figure 1. Max. Reverse Power Dissipation vs.
Junction Temperature

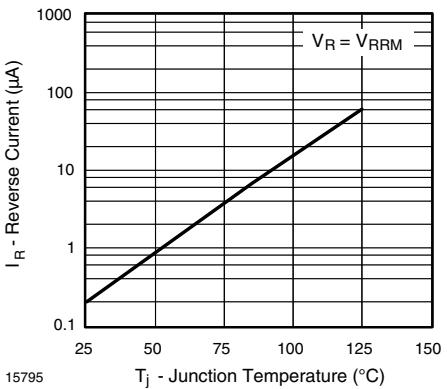


Figure 2. Reverse Current vs. Junction Temperature

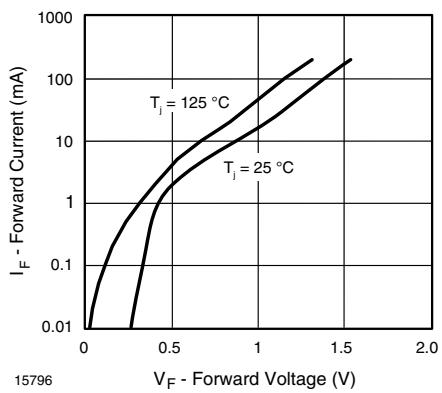


Figure 3. Forward Current vs. Forward Voltage

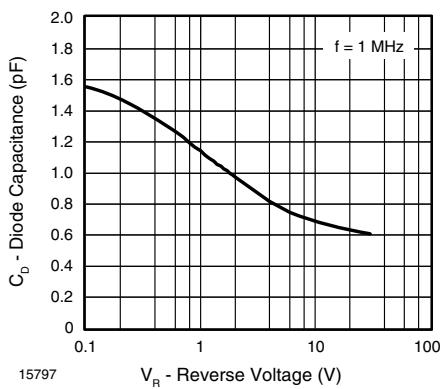


Figure 4. Diode Capacitance vs. Reverse Voltage