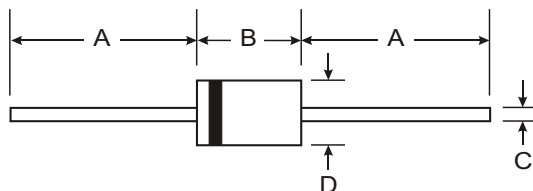


### Features

- High Reverse Breakdown Voltage
- Low Turn-On Voltage
- Guard Ring Construction for Transient Protection



### Mechanical Data

- Case: DO-35, Plastic
- Leads: Solderable per MIL-STD-202, Method 208
- Marking: Type Number
- Polarity: Cathode Band
- Weight: 0.13 grams (approx.)

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

### Maximum Ratings @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	BAT46	Unit
Peak Repetitive Reverse Voltage	$V_{RRM}$	100	V
Working Peak Reverse Voltage	$V_{RWM}$		
DC Blocking Voltage	$V_R$		
Forward Continuous Current (Note 1)	$I_{FM}$	150	mA
Average Rectified Output Current (Note 1)	$I_O$	75	mA
Repetitive Peak Forward Current (Note 1) @ $t \leq 1.0\text{s}$	$I_{FRM}$	350	mA
Non-Repetitive Peak Forward Surge Current @ $t = 10\text{ms}$	$I_{FSM}$	750	mA
Power Dissipation (Note 1)	$P_d$	200	mW
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	500	K/W
Operating and Storage Temperature Range	$T_j, T_{STG}$	-55 to +125	$^\circ\text{C}$

### Electrical Characteristics @ $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic	Symbol	Min	Typ	Max	Unit	Test Condition
Reverse Breakdown Voltage	$V_{(BR)R}$	100	—	—	V	$I_{RS} = 10\mu\text{A}$ (pulses)
Reverse Leakage Current (Note 2)	$I_R$	—	—	0.5 5.0 0.8 7.5 2.0 15 5.0 20	$\mu\text{A}$	$V_R = 1.5\text{V}$ $V_R = 1.5\text{V}, T_j = 60^\circ\text{C}$ $V_R = 10\text{V}$ $V_R = 10\text{V}, T_j = 60^\circ\text{C}$ $V_R = 50\text{V}$ $V_R = 50\text{V}, T_j = 60^\circ\text{C}$ $V_R = 75\text{V}$ $V_R = 75\text{V}, T_j = 60^\circ\text{C}$
Forward Voltage Drop (Note 2)	$V_F$	—	—	0.25 0.45 1.00	V	$I_F = 0.1\text{mA}$ $I_F = 10\text{mA}$ $I_F = 250\text{mA}$
Junction Capacitance	$C_j$	—	10 6.0	—	pF	$V_R = 0\text{V}, f = 1.0\text{MHz}$ $V_R = 1.0\text{V}, f = 1.0\text{MHz}$

- Notes:
1. Valid provided that electrodes are kept at ambient temperature.
  2.  $t < 300\mu\text{s}$ , Duty Cycle  $< 2\%$ .