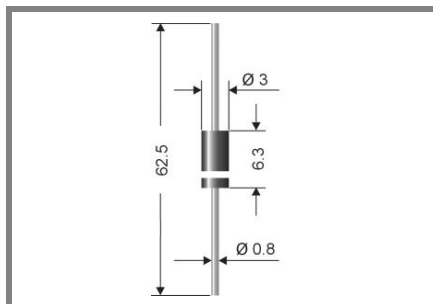


# BV 4, BV 6



## Axial lead diode

## High voltage silicon rectifier diodes

### BV 4, BV 6

**Forward Current: 0,1 A**

**Reverse Voltage: 4000 to 6000 V**

### Features

- Max solder temperature: 260°C
- Plastic material has UL classification 94V-0

### Mechanical Data

- Plastic case DO-15 / DO-204AC
- Weight approx.: 0.4g
- Terminals: plated terminals solderable per MIL-STD-750
- Mounting position: any
- Standard packaging: 4000 pieces per ammo

1) Valid, if leads are kept at ambient temperature at a distance of 10 mm from case

2)  $I_F = 100\text{mA}$ ,  $T_j = 25^\circ\text{C}$

3)  $T_A = 25^\circ\text{C}$

Type	Repetitive peak reverse voltage	Surge peak reverse voltage	Max. reverse recovery time	Max. forward voltage
	$V_{RRM}$ V	$V_{RSM}$ V	$I_F = -A$ $I_R = -A$ $I_{RR} = -A$ $t_{rr}$ ns	$V_F^{(2)}$
BV 4	4000	4000	-	5
BV 6	6000	6000	-	5

Absolute Maximum Ratings		$T_c = 25^\circ\text{C}$ , unless otherwise specified	
Symbol	Conditions	Values	Units
$I_{FAV}$	Max. averaged fwd. current, R-load, $T_A = 50^\circ\text{C}$ <sup>1)</sup>	0,1	A
$I_{FRM}$	Repetitive peak forward current $f > \text{Hz}$ <sup>1)</sup>		A
$I_{FSM}$	Peak forward surge current 50 Hz half sinus-wave <sup>3)</sup>	15	A
$i^2t$	Rating for fusing, $t < \text{ms}$ <sup>3)</sup>		$\text{A}^2\text{s}$
$R_{thA}$	Max. thermal resistance junction to ambient <sup>1)</sup>	60	K/W
$R_{thT}$	Max. thermal resistance junction to terminals <sup>1)</sup>		K/W
$T_j$	Operating junction temperature	-50...+150	$^\circ\text{C}$
$T_s$	Storage temperature	-50...+150	$^\circ\text{C}$

Characteristics		$T_c = 25^\circ\text{C}$ , unless otherwise specified	
Symbol	Conditions	Values	Units
$I_R$	Maximum leakage current, $T_j = 25^\circ\text{C}$ ; $V_R = V_{RRM}$	<3	$\mu\text{A}$
	$T_j = ^\circ\text{C}$ ; $V_R = V_{RRM}$		
$C_j$	Typical junction capacitance (at MHz and applied reverse voltage of V)	-	pF
$Q_{rr}$	Reverse recovery charge ( $U_R = V$ ; $I_F = A$ ; $dI_F/dt = \text{A/ms}$ )	-	$\mu\text{C}$
$E_{RSM}$	Non repetitive peak reverse avalanche energy ( $I_R = \text{mA}$ ; $T_j = ^\circ\text{C}$ ; inductive load switched off)	-	mJ

