

DIOTEC ELEKTRONISCHE

Silicon Rectifier

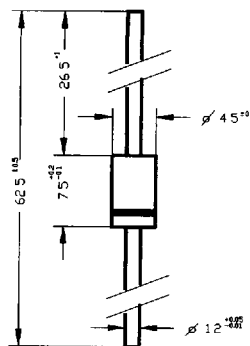
Nominal current 3A / 1,5A / 1 A

Repetitive peak reverse voltage 2000..6000 V

Plastic case \approx DO201

Plastic case according UL94-V0

Weight approx. 1g



All dimensions in mm

Maximum ratings

Type	Repetitive peak reverse voltage V_{RRM} [V]	Surge peak reverse voltage V_{RSM} [V]	Nom. Current (R - Load) ¹⁾ at $T_A=50^\circ\text{C}$ I_{FAV} [A]	Repetitive peak forw. current ¹⁾ I_{FRM} [A]
BY 2000	2000	2000	3	20
BY 4000	4000	4000	1.5	10
BY 6000	6000	6000	1	6

Nominal current at half wave rectif. with resistive load, $T_A=50^\circ\text{C}$

I_{FAV}

1 A

Surge forward current half cycle sine wave starting at $T_J=25^\circ\text{C}$

I_{FSM}

100 A

Junction temperature

T_J

150 $^\circ\text{C}$

Operating temperature

T_A

-40...+150 $^\circ\text{C}$

Storage temperature

T_S

-40...+150 $^\circ\text{C}$

Characteristics

at $T_A=25^\circ\text{C}$

Forward voltage at nominal current

BY2000

V_F

< 1.1 V

BY4000

V_F

< 2.1 V

BY6000

V_F

< 3.2 V

Leakage current at V_{RRM}

I_R

< 20 μA

Thermal resistance

junction - ambient air

R_{THU}

< 30 K/W¹⁾

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