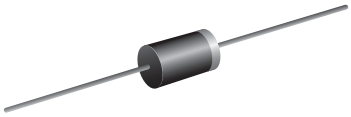
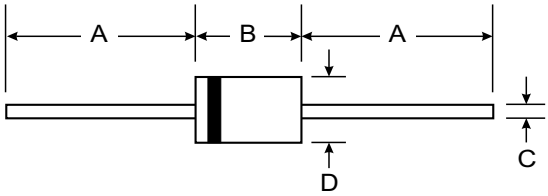
BY251 - BY2000

STANDARD RECOVERY RECTIFIER DIODES





DO-201AD		
Dim	**Min**	**Max**
A	25.40	—
B	7.20	9.50
C	1.20	1.30
D	4.80	5.30
All Dimensions in mm		

Features

- Periodische Spitzensperrspannung
- Kunststoffgehäuse
- Weight approx. – Gewicht ca.
- Plastic material has UL classification 94V-0
- Gehäusematerial UL94V-0 klassifiziert

Mechanical Data

- Case: DO-201AD, Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 1.2 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

RoHS COMPLIANT

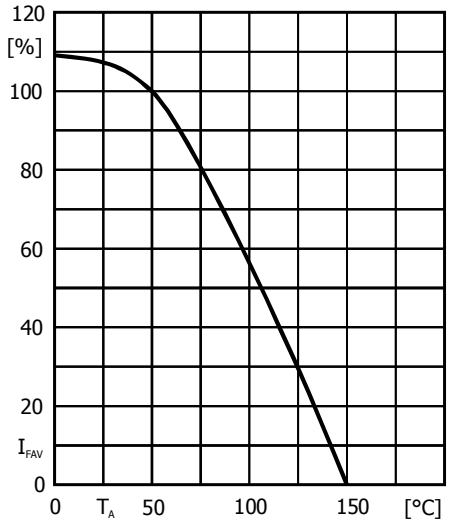
Maximum Ratings T_A = 25°C unless otherwise specified

Type Typ	Repetitive peak reverse voltage Periodische Spitzensperrspannung V_{RRM} [V]	Surge peak reverse voltage Stoßspitzensperrspannung V_{RSM} [V]
BY251	200	200
BY252	400	400
BY253	600	600
BY254	800	800
BY255	1300	1300
BY1600	1600	1600
BY1800	1800	1800
BY2000	2000	2000

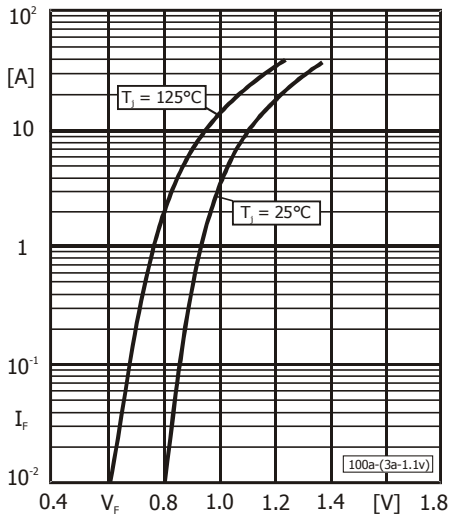
Max. average forward rectified current, R-load Dauergrenzstrom in Einwegschaltung mit R-Last	T_A = 50°C	I_{FAV}	3 A [3])
Repetitive peak forward current – Periodischer Spitzenstrom	f > 15 Hz	I_{FRM}	20 A [3])
Peak forward surge current, 50/60 Hz half sine-wave Stoßstrom für eine 50/60 Hz Sinus-Halbwelle	T_A = 25°C	I_{FSM}	100/110 A
Rating for fusing, Grenzlastintegral, t < 10 ms	T_A = 25°C	i^2t	50 A^2s
Junction temperature – Sperrschichttemperatur Storage temperature – Lagerungstemperatur		T_j T_S	-50...+150°C -50...+175°C

Characteristics

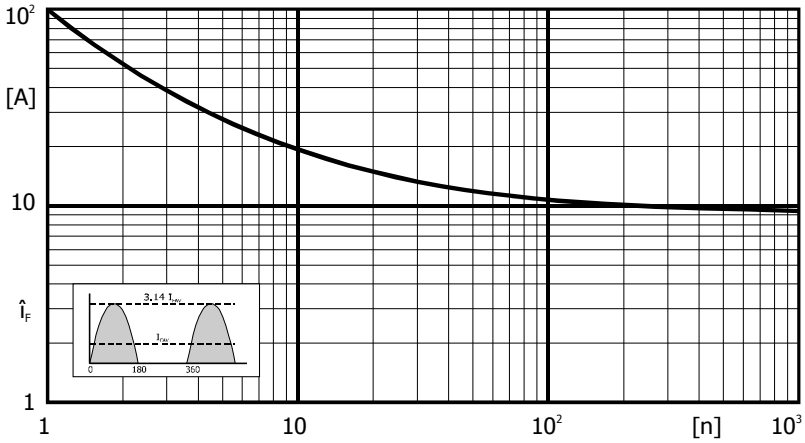
Forward voltage – Durchlass-Spannung	T_j = 25°C	I_F = 3 A	V_F	< 1.1 V
Leakage current – Sperrstrom	T_j = 25°C	$V_R = V_{RRM}$	I_R	< 5 µA
Typical junction capacitance Typische Sperrschichtkapzität		V_R = 4 V	C_j	20 pF
Reverse recovery time Sperrverzug	I_F = 0.5 A through/über I_R = 1 A to I_R = 0.25 A		rr	typ. 1500 ns
Thermal resistance junction to ambient air Wärmewiderstand Sperrschicht – umgebende Luft			R_{thA}	< 25 K/W [1])
Thermal resistance junction to leads Wärmewiderstand Sperrschicht – Anschlussdraht			R_{thL}	< 10 K/W



Rated forward current versus ambient temperature
Zul. Richtstrom in Abh. von der Umgebungstemp.



Forward characteristics (typical values)
Durchlasskennlinien (typische Werte)



Peak forward surge current versus number of cycles at 50 Hz
Durchlaß-Spitzenstrom in Abh. von der Zahl der Halbwellen bei 50 Hz