



Axial lead diode

Standard silicon rectifier diodes

BY 133...BY 135

Forward Current: 1 A

Reverse Voltage: 150 to 1300 V

Features

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

Mechanical Data

- Plastic case DO-41 / DO-204AL
- Weight approx.: 0,4 g
- Terminals: plated terminals solderable per MIL-STD-750
- Mounting position: any
- Standard packaging: 5000 pieces per ammo

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

2) $I_F = 1 \text{ A}$, $T_j = 25 \text{ °C}$

3) $T_A = 25 \text{ °C}$

Type	Repetitive peak reverse voltage	Surge peak reverse voltage	Max. reverse recovery time	Max. forward voltage
	V_{RRM} V	V_{RSM} V	$I_F = - \text{A}$ $I_R = - \text{A}$ $I_{RR} = - \text{A}$ t_{rr} ns	$V_F^{2)}$
BY 133	1300	1600	-	1,3
BY 134	600	800	-	1,3
BY 135	150	200	-	1,3

Absolute Maximum Ratings		$T_c = 25 \text{ °C}$, unless otherwise specified	
Symbol	Conditions	Values	Units
I_{FAV}	Max. averaged fwd. current, R-load, $T_A = 50 \text{ °C}^1)$	1	A
I_{FRM}	Repetitive peak forward current $f > 15 \text{ Hz}^1)$	10	A
I_{FSM}	Peak forward surge current 50 Hz half sinus-wave $^3)$	50	A
i^2t	Rating for fusing, $t < 10 \text{ ms}^3)$	12,5	A ² s
R_{thA}	Max. thermal resistance junction to ambient $^1)$	45	K/W
R_{thT}	Max. thermal resistance junction to terminals $^1)$	-	K/W
T_j	Operating junction temperature	-50...+175	°C
T_s	Storage temperature	-50...+175	°C

Characteristics		$T_c = 25 \text{ °C}$, unless otherwise specified	
Symbol	Conditions	Values	Units
I_R	Maximum leakage current, $T_j = 25 \text{ °C}$; $V_R = V_{RRM}$	<5	μA
	$T_j = 100 \text{ °C}$; $V_R = V_{RRM}$	<50	μA
C_j	Typical junction capacitance (at MHz and applied reverse voltage of V)	-	pF
Q_{rr}	Reverse recovery charge ($U_R = V$; $I_F = A$; $dI_F/dt = A/ms$)	-	μC
E_{RSM}	Non repetitive peak reverse avalanche energy ($I_R = \text{mA}$; $T_j = \text{°C}$; inductive load switched off)	-	mJ



