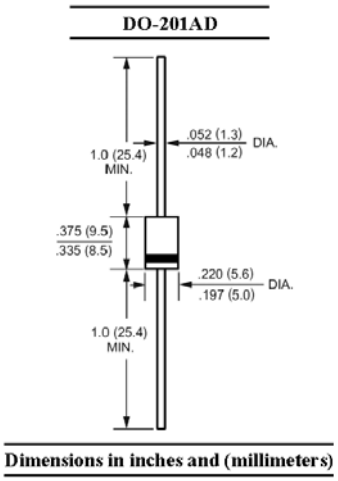
BY251 THRU BY255

PLASTIC SILICON RECTIFIERS

Features

- Low forward voltage
- High current capability
- Low leakage current
- High surge capability
- Low cost



Dimensions in inches and (millimeters)

Mechanical Data

- Case: Molded plastic body, DO-201AD

Absolute Maximum Ratings and Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20%.

Parameter	Symbols	BY251	BY252	BY253	BY254	BY255	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	200	400	600	800	1300	V
Maximum RMS Voltage	V_{RMS}	140	280	420	560	910	V
Maximum DC Blocking Voltage	V_{DC}	200	400	600	800	1300	V
Maximum Average Forward Rectified Current	$I_{(AV)}$	3					A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I_{FSM}	100					A
Maximum Forward Voltage at 3 A DC	V_F	1.1					V
Maximum Reverse Current at T_A = 25 °C at Rated DC Blocking Voltage at T_A = 100 °C	I_R	20 100					µA
Typical Thermal Resistance to Ambient Air	$R_{\theta JA}$	20					°C/W
Operating and Storage Temperature Range	T_j, T_{stg}	- 55 to + 150					°C

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Dated : 14/05/2009

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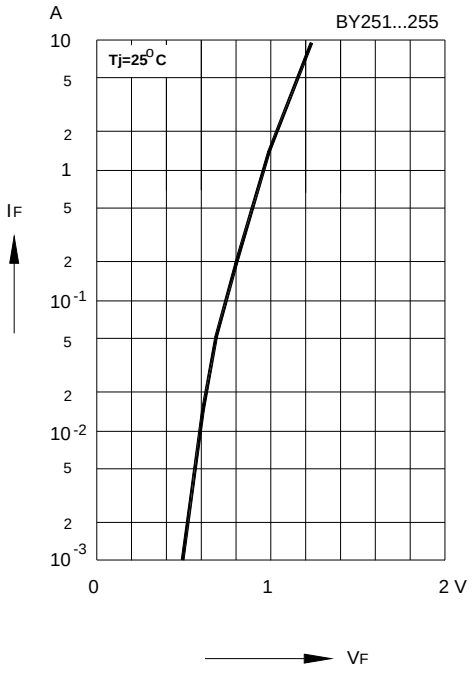
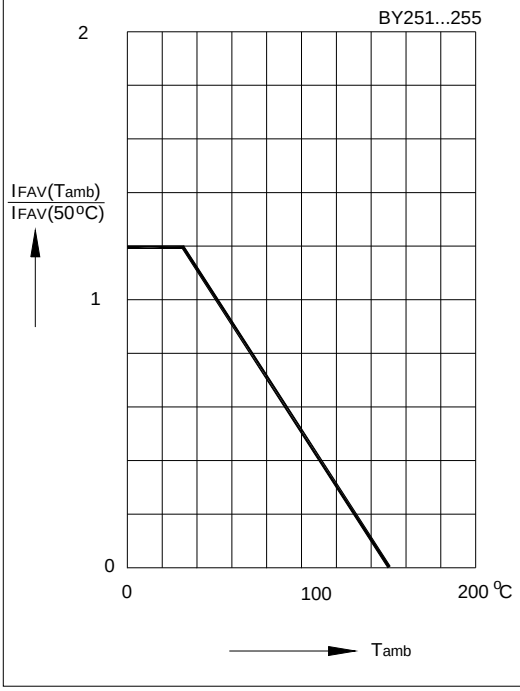
Forward characteristic



Admissible rectified current versus ambient temperature

Valid provided that electrodes are kept at ambient temperature at a distance of 10 mm from case



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