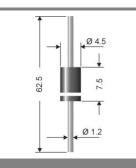
## BY 296...BY 299



### Axial lead diode

# Fast silicon rectifier diodes

BY 296...BY 299

Forward Current: 2 A

Reverse Voltage: 100 to 800 V

#### Features

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

#### **Mechanical Data**

- Plastic case DO201
- Weight approx.: 1 g
- Terminals: plated terminals
  solderable per MIL-STD-750
- Mounting position: any
- Standard packaging: 1700 pieces per ammo

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

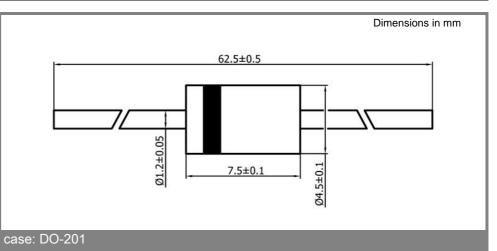
2) I<sub>F</sub> = 3 A, T<sub>i</sub> = 25 °C

3) 
$$T_A = 25 °C$$

٦.	Туре	Repetitive peak	Surge peak	Max. reverse	Max.
		reverse voltage	reverse voltage	recovery time	forward voltage
				I <sub>F</sub> = 0,5 A	
				I <sub>R</sub> = 1 A	
				I <sub>RR</sub> = 0,25 A	
		V <sub>RRM</sub>	V <sub>RSM</sub>	t <sub>rr</sub>	
		V	V	ns	V <sub>F</sub> <sup>2)</sup>
	BY 296	100	100	500	1,3
	BY 297	200	200	500	1,3
	BY 298	400	400	500	1,3
	BY 299	800	800	500	1,3

Absolute Maximum Ratings Tc = 25 °C, unless otherwise specified						
Symbol	Conditions	Values	Units			
I <sub>FAV</sub>	Max. averaged fwd. current, R-load, T <sub>A</sub> = 50 °C $^{\rm 1)}$	2	А			
I <sub>FRM</sub>	Repetitive peak forward current f > 15 Hz <sup>1)</sup>	20	А			
I <sub>FSM</sub>	Peak forward surge current 50 Hz half sinus-wave <sup>3)</sup>	70	А			
i²t	Rating for fusing, t < 10 ms <sup>3)</sup>	24	A²s			
R <sub>thA</sub>	Max. thermal resistance junction to ambient <sup>1)</sup>	25	K/W			
R <sub>thT</sub>	Max. thermal resistance junction to terminals <sup>1)</sup>	-	K/W			
T <sub>j</sub>	Operating junction temperature	-50+150	°C			
T <sub>s</sub>	Storage temperature	-50+175	°C			

Characte	ristics Tc = 25 °C	Tc = 25 °C, unless otherwise specified		
Symbol	Conditions	Values	Units	
I <sub>R</sub>	Maximum leakage current, $T_j$ = 25 °C; $V_R$ = $V_{RRM}$	<10	μA	
	$T_j = °C; V_R = V_{RRM}$			
CJ	Typical junction capacitance	-	pF	
	(at MHz and applied reverse voltage of V)			
Q <sub>rr</sub>	Reverse recovery charge	-	μC	
	$(U_R = V; I_F = A; dI_F/dt = A/ms)$			
E <sub>RSM</sub>	Non repetitive peak reverse avalanche energy	-	mJ	
	$(I_R = mA; T_j = °C; inductive load switched off)$			



## BY 296...BY 299

