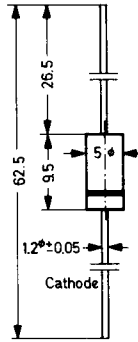


# BY296 . . . BY299

## Fast Silicon Rectifiers

Nominal current                    2 A  
 Repetitive peak reverse voltage    100 ... 800 V



These rectifiers are delivered taped.  
 Details see "Taping".

Plastic case ≈ JEDEC DO-13

Weight approx. 1 g  
 Dimensions in mm

## Absolute Maximum Ratings

	Symbol	Value	Unit	
Repetitive Peak Reverse Voltage	<b>BY296</b>	$V_{RRM}$	100	V
	<b>BY297</b>	$V_{RRM}$	200	V
	<b>BY298</b>	$V_{RRM}$	400	V
	<b>BY299</b>	$V_{RRM}$	800	V
Nominal Current at Half Wave Rectification with Resistive Load at $T_{amb} = 50\text{ °C}$	$I_{FAV}$	2 <sup>1)</sup>	A	
Surge Forward Current, Half Cycle 50 Hz, starting from $T_j = 25\text{ °C}$	$I_{FSM}$	70	A	
Repetitive Peak Forward Current at $\Theta < 40\text{ °}$ , $f > 15\text{ Hz}$ , $T_{amb} = 25\text{ °C}$	$I_{FRM}$	10 <sup>1)</sup>	A	
Junction Temperature	$T_j$	150	°C	
Ambient Operating Temperature Range	$T_{amb}$	-40 to +150	°C	
Storage Temperature Range	$T_s$	-40 to +150	°C	

<sup>1)</sup> Valid provided that leads are kept at ambient temperature at a distance of 10 mm from case.

**Characteristics**

	Symbol	Min.	Typ.	Max.	Unit
Forward Voltage at $I_F = 3 \text{ A}$ , $T_j = 25 \text{ }^\circ\text{C}$	$V_F$	–	–	1.3	V
Leakage Current at $V_{RRM}$ , $T_j = 25 \text{ }^\circ\text{C}$	$I_R$	–	–	10	$\mu\text{A}$
Forward Recovery Time at $I_F = 100 \text{ mA}$	$t_{fr}$	–	–	1	$\mu\text{s}$
Reverse Recovery Time from $I_F = 10 \text{ mA}$ through $I_R = 10 \text{ mA}$ to $I_R = 1 \text{ mA}$	$t_{rr}$	–	–	0.5	$\mu\text{s}$
Thermal Resistance Junction to Ambient Air	$R_{thA}$	–	–	35	K/W

1) Valid provided that leads are kept at ambient temperature at a distance of 10 mm from case.

