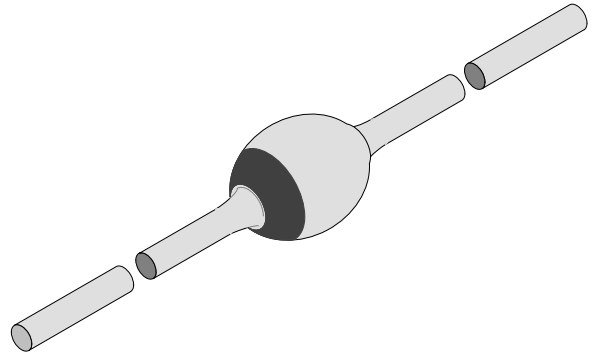


## Very Fast Soft–Recovery Avalanche Rectifier

### Features

- Glass passivated junction
- Hermetically sealed package
- Very low switching losses
- Low reverse current
- High reverse voltage



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### Applications

Switched mode power supplies  
High–frequency inverter circuits

### Absolute Maximum Ratings

$T_j = 25^\circ\text{C}$

Parameter	Test Conditions	Type	Symbol	Value	Unit
Reverse voltage =Repetitive peak reverse voltage		BYV26A	$V_R=V_{RRM}$	200	V
		BYV26B	$V_R=V_{RRM}$	400	V
		BYV26C	$V_R=V_{RRM}$	600	V
		BYV26D	$V_R=V_{RRM}$	800	V
		BYV26E	$V_R=V_{RRM}$	1000	V
Peak forward surge current	$t_p=10\text{ms}$ , half sinewave		$I_{FSM}$	30	A
Average forward current			$I_{FAV}$	1	A
Non repetitive reverse avalanche energy	$I_{(BR)R}=400\text{mA}$ , inductive load		$E_R$	10	mJ
Junction and storage temperature range			$T_j=T_{stg}$	-55...+175	$^\circ\text{C}$

### Maximum Thermal Resistance

$T_j = 25^\circ\text{C}$

Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	$l=10\text{mm}$ , $T_L=\text{constant}$	$R_{thJA}$	45	K/W

# BYV26

## Electrical Characteristics

$T_j = 25^\circ\text{C}$

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=1\text{A}$		$V_F$			2.5	V
	$I_F=1\text{A}, T_j=175^\circ\text{C}$		$V_F$			1.3	V
Reverse current	$V_R=V_{RRM}$		$I_R$			5	$\mu\text{A}$
	$V_R=V_{RRM}, T_j=150^\circ\text{C}$		$I_R$			100	$\mu\text{A}$
Reverse breakdown voltage	$I_R=100\mu\text{A}$	BYV26A	$V_{(BR)R}$	300			V
		BYV26B	$V_{(BR)R}$	500			V
		BYV26C	$V_{(BR)R}$	700			V
		BYV26D	$V_{(BR)R}$	900			V
		BYV26E	$V_{(BR)R}$	1100			V
Reverse recovery time	$I_F=0.5\text{A}, I_R=1\text{A}, i_R=0.25\text{A}$	BYV26A -BYV26C	$t_{rr}$			30	ns
		BYV26D -BYV26E	$t_{rr}$			75	ns

## Characteristics ( $T_j = 25^\circ\text{C}$ unless otherwise specified)

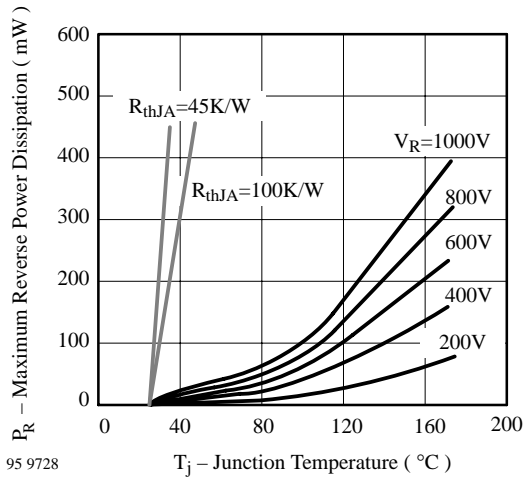


Figure 1. Max. Reverse Power Dissipation vs. Junction Temperature

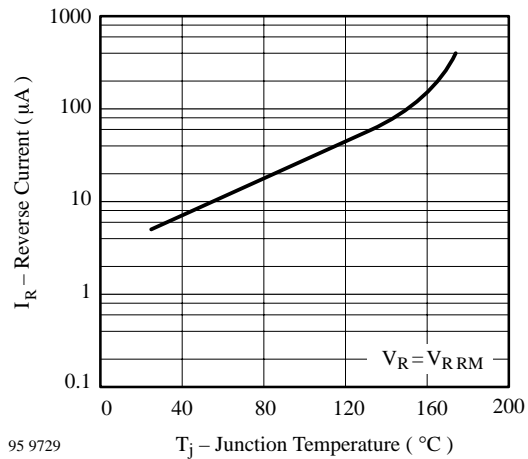
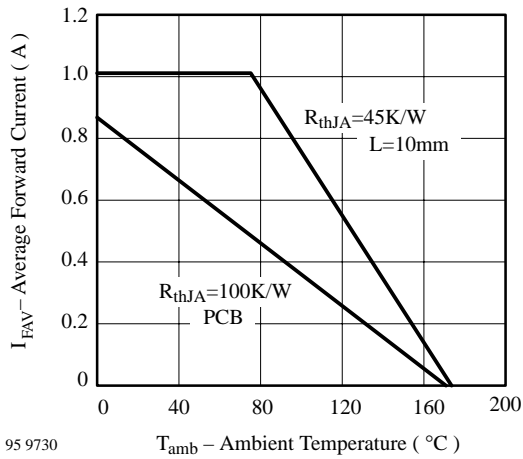


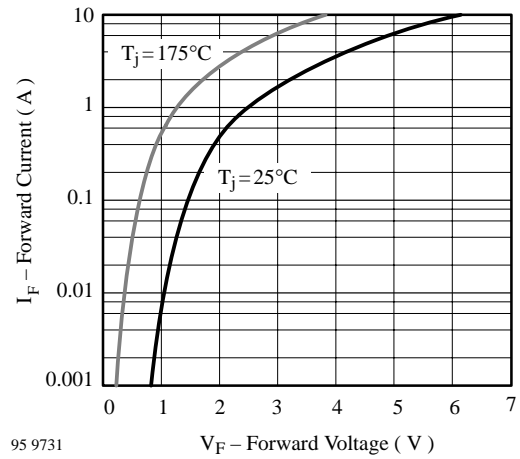
Figure 2. Max. Reverse Current vs. Junction Temperature

# BYV26



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Figure 3. Max. Average Forward Current vs. Ambient Temperature



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Figure 4. Max. Forward Current vs. Forward Voltage

## Dimensions in mm

