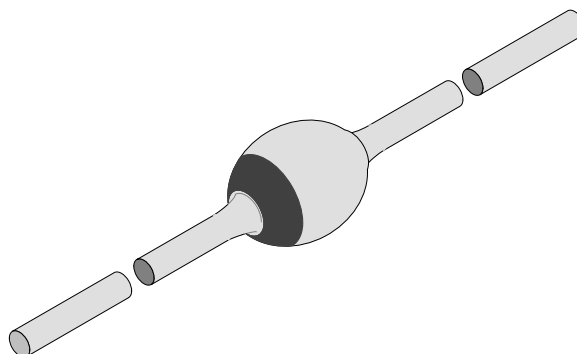


Very Fast Soft-Recovery Avalanche Rectifier

Features

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



94 9539

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	μA
	$V_R=V_{RRM}, T_j=150^\circ\text{C}$		I_R			100	μA
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)

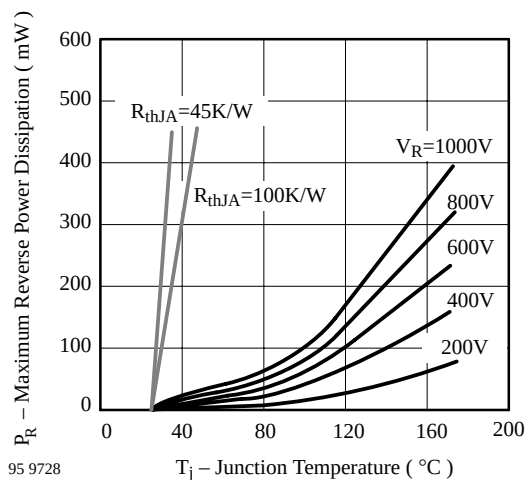


Figure 1. Max. Reverse Power Dissipation vs. Junction Temperature

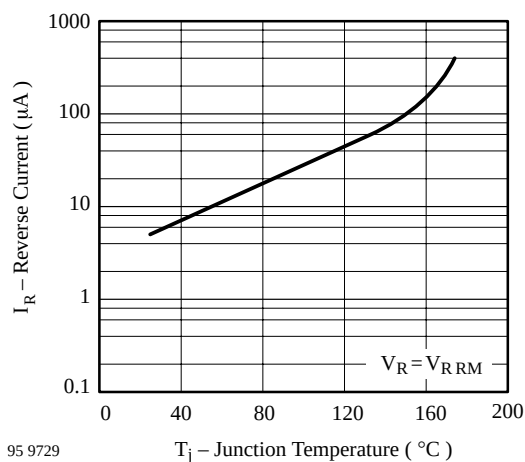


Figure 2. Max. Reverse Current vs. Junction Temperature

BYV26

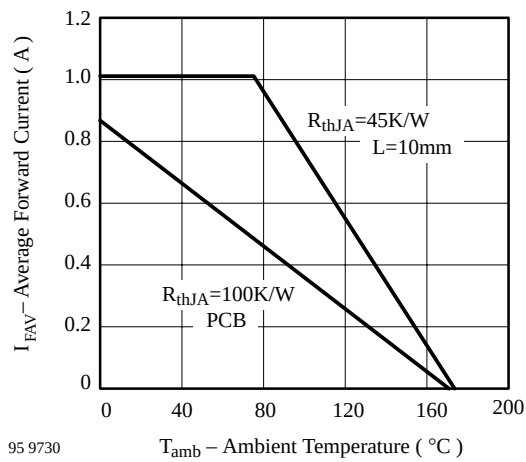


Figure 3. Max. Average Forward Current vs. Ambient Temperature

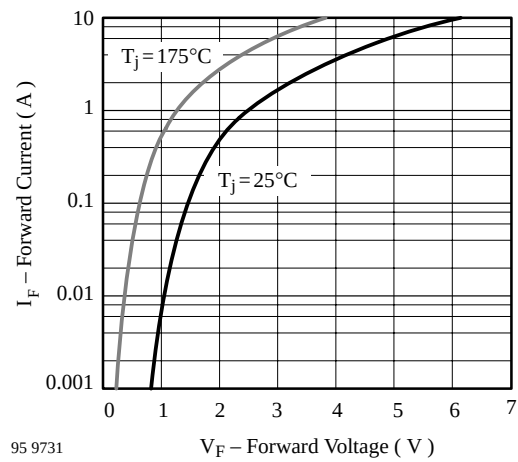


Figure 4. Max. Forward Current vs. Forward Voltage

Dimensions in mm

