

# BYV26A THRU BYV26E

## SUPER FAST RECTIFIERS

Reverse Voltage - 200 to 1000 V

Forward Current - 1 A

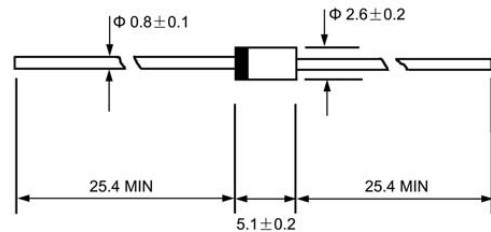
### Features

- Low cost
- Diffused junction
- Low forward voltage drop
- High current capability

### Mechanical Data

- Case: Molded plastic, DO-41
- Lead: Axial leads, solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode end
- Mounting Position: Any

### DO - 41



Dimensions in millimeters

### Maximum Ratings and Electrical Characteristics

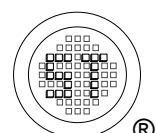
Ratings at 25°C ambient temperature unless otherwise specified. Single phase, half-wave, 50 Hz, resistive or inductive load, for capacitive load, derate current by 20%.

Parameter	Symbols	BYV26A	BYV26B	BYV26C	BYV26D	BYV26E	Units
Maximum Recurrent Peak Reverse Voltage	$V_{RRM}$	200	400	600	800	1000	V
Maximum RMS Voltage	$V_{RMS}$	140	280	420	560	700	V
Maximum DC Blocking Voltage	$V_{DC}$	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 0.375" (9.5 mm) Lead Length at $T_A = 75^\circ\text{C}$	$I_{F(AV)}$	1					A
Peak Forward Surge Current 10 ms Single Half Sine Wave Superimposed on Rated Load at $T_J = 125^\circ\text{C}$	$I_{FSM}$	30					A
Maximum Forward Voltage at 1 A $T_J = 25^\circ\text{C}$ $T_J = 175^\circ\text{C}$	$V_F$	2.5 1.3					V
Maximum Reverse Current at Rated DC Blocking Voltage $T_A = 25^\circ\text{C}$ $T_A = 100^\circ\text{C}$	$I_R$	5 150					$\mu\text{A}$
Maximum Reverse Recovery Time <sup>1)</sup>	$t_{rr}$	30			75		ns
Typical Junction Capacitance <sup>2)</sup>	$C_J$	45			40		pF
Typical Thermal Resistance <sup>3)</sup>	$R_{\theta JA}$	100					$^\circ\text{C/W}$
Operating Junction temperature range	$T_J$	- 55 to + 150					$^\circ\text{C}$
Storage temperature range	$T_{stg}$	- 55 to + 150					$^\circ\text{C}$

<sup>1)</sup> Reverse recovery test conditions:  $I_F = 0.5\text{ A}$ ,  $I_R = 1\text{ A}$ ,  $I_{rr} = 0.25\text{ A}$ .

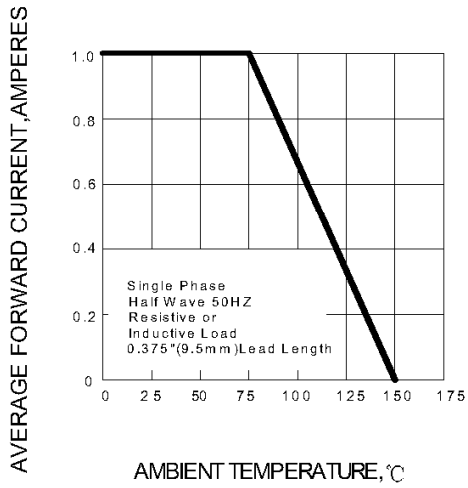
<sup>2)</sup> Measured at 1 MHz and applied reverse voltage of 4 V D.C.

<sup>3)</sup> Thermal resistance from junction to ambient.

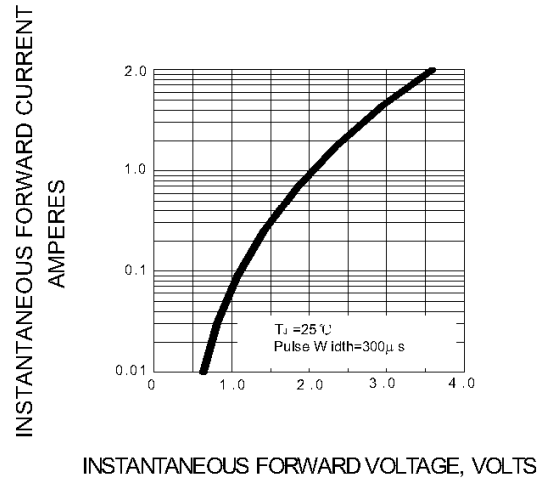


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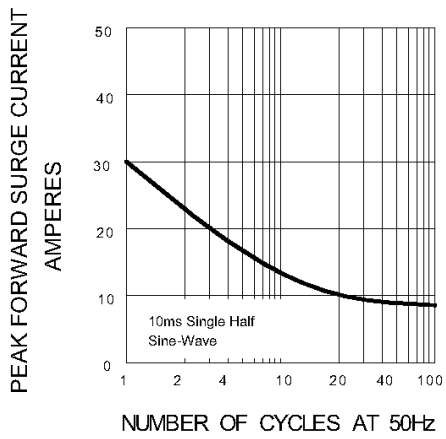
**FORWARD DERATING CURVE**



**TYPICAL FORWARD CHARACTERISTIC**



**PEAK FORWARD SURGE CURRENT**



**TYPICAL JUNCTION CAPACITANCE**

