

BYV26A THRU BYV26E

SUPER FAST RECTIFIERS

Reverse Voltage - 200 to 1000 V

Forward Current - 1 A

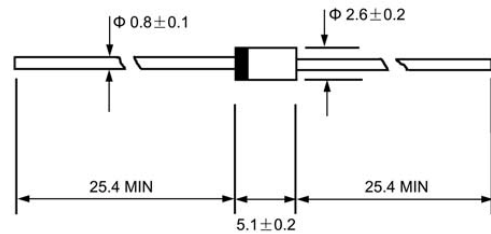
Features

- 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

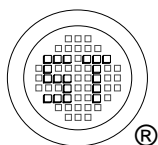
Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half-wave, 50 Hz, resistive or inductive load, for capacitive load, derate current by 20%.

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	V_F	2.5					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					μA
Maximum Reverse Recovery Time ¹⁾	t_{rr}	30			75		ns
Typical Junction Capacitance ²⁾	C_J	45			40		pF
Typical Thermal Resistance ³⁾	$R_{\theta JA}$	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					$^\circ\text{C}$

¹⁾ Reverse recovery test conditions: $I_F = 0.5$ A, $I_R = 1$ A, $I_{rr} = 0.25$ A.

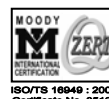
²⁾ Measured at 1 MHz and applied reverse voltage of 4 V D.C.

³⁾ Thermal resistance from junction to ambient.



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FIG.1 – FORWARD DERATING CURVE

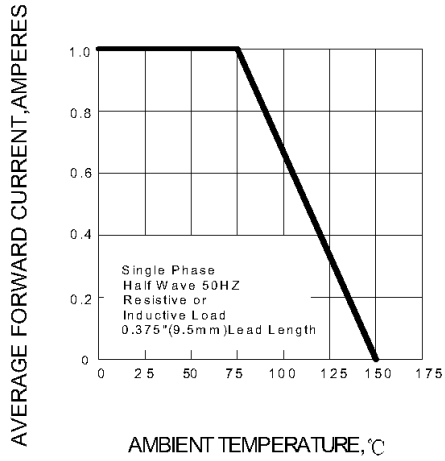


FIG.2 – TYPICAL FORWARD CHARACTERISTIC

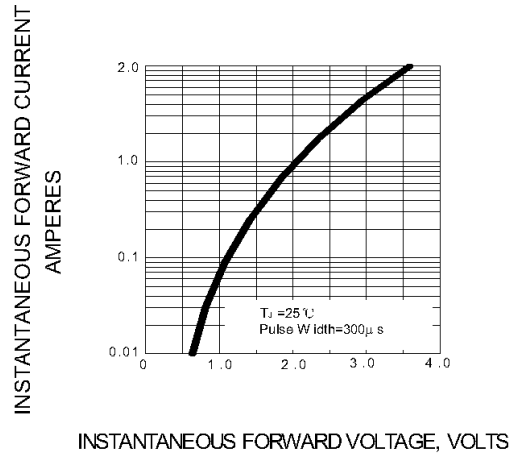


FIG.3 – PEAK FORWARD SURGE CURRENT

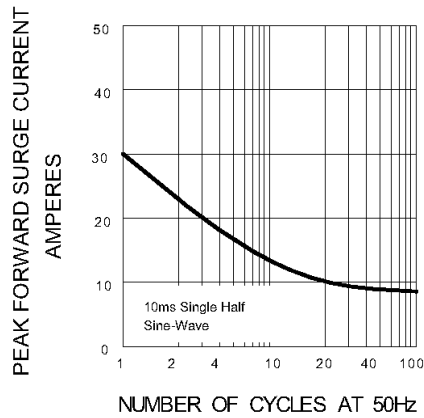
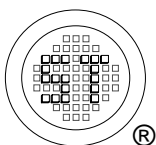
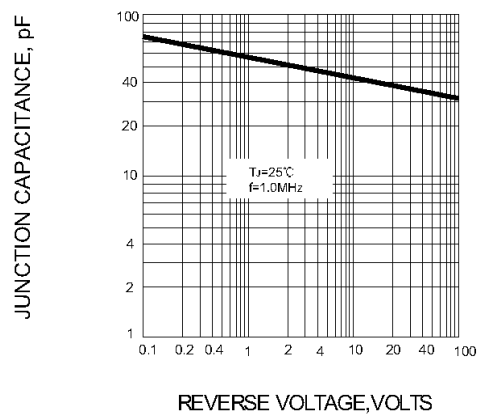


FIG.4 – TYPICAL JUNCTION CAPACITANCE



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