

DO-204AL (DO-41)



Voltage 200V to 1000V Current 1.0 A at 55 °C

HYPERECTIFIER

FEATURES

- Ultrafast recovery time for high efficiency
- Low power losses
- Low forward voltage drop
- High forward surge current capability
- Solder dip 260°C, 10s
- AEC-Q101 qualified



 Meets MSL level 1, per J-STD-020, LF maximum peak of 260° C



RoHS

MECHANICAL DATA

- Case: DO-204AL (DO-41). Epoxy meets UL 94V-0 flammability rating.
- Polarity: Color band denotes cathode end.
- **Terminals:** Matte tin plated leads, solderable per MIL-STD-750 Method 2026, J-STD-002 and JESD22-B102. Consumer grade, meets JESD 201 class 1A whisker test.

TYPICAL APPLICATIONS

Used in high frequency rectifier of switching mode power supplies, inverters, freewheeling diodes, dc-to-dc converters, and other power switching application.

Maximun Ratings and Electrical Characteristics at 25°C

	Marking Code	BYV26A	BYV26B	BYV26C	BYV26D	BYV26E
V_{RRM}	Peak Recurrent Reverse Voltage (V)	200	400	600	800	1000
V _{RMS}	Maximum RMS Voltage (V)		280	420	560	700
V _{DC}	Maximum DC Blocking Voltage (V)	200	400	600	800	1000
I _{F(AV)}	Forward current at Tamb = 55 °C	1 A				
I _{FRM}	Recurrent peak forward surge current	10 A				
I _{FSM}	8.3 ms. peak forward surge current (Jedec Method)	30 A				
t _{rr}	Max. reverse recovery time from $I_F = 0.5 \text{ A}$; $I_R = 1 \text{ A}$; $I_{RR} = 0.25 \text{ A}$	30 ns 75 ns		ī ns		
V_{BR}	Avalanche breakdown voltage at 100µA (V)	>300	>500	>700	>900	>1100
T _j	Operating temperature range	-65 to + 175 °C				
T _{stg}	Storage temperature range	-65 to + 175 °C				
E _{RSM}	Maximum non repetitive peak reverse avalanche energy $I_R = 0.5 \text{ A}$; $T_j = 25 ^{\circ}\text{C}$	20 mJ				

Electrical Characteristics at Tamb = 25 °C

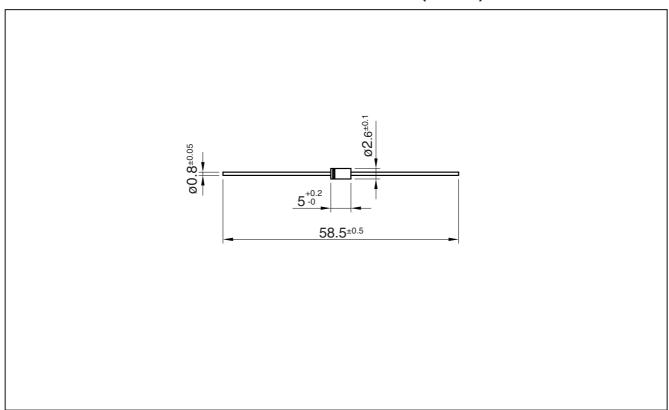
V _F	Max. forward voltage drop at I _F = 1 A	at 25 °C at 175 °C	2.5 V 1.3 V
I _R	max reverse carrent at Time	at 25 °C at 165 °C	5 μΑ 150 μΑ
R _{th (j-a)}	Max. thermal resistance (I = 10mm)		50 °C/W



Ordering information

PREFERRED P/N	PACKAGE CODE	DELIVERY MODE	BASE QUANTITY	UNIT WEIGHT (g)
BYV26D AMP	AMP	AMMO BOX	5,000	0.325
BYV26D TR	TR	14" diameter tape and reel	5,000	0.325

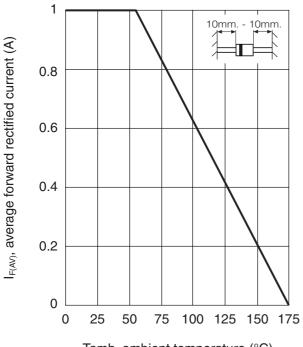
Package Outline Dimensions: (mm) DO-204AL (DO-41)





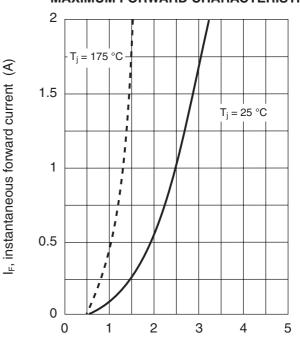
Ratings and Characteristics (Ta 25 °C unless otherwise noted)

FORWARD CURRENT DERATING CURVE



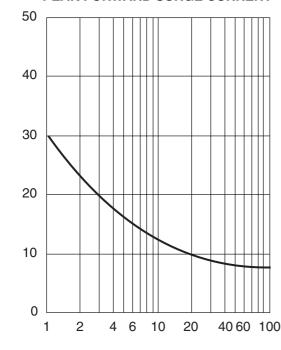
Tamb, ambient temperature (°C)

MAXIMUM FORWARD CHARACTERISTIC



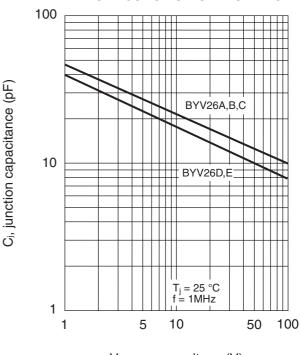
V_F, instantaneous forward voltage (V)

MAXIMUM NON REPETITIVE PEAK FORWARD SURGE CURRENT



Number of cycles at 50 Hz.

TYPICAL JUNCTION CAPACITANCE



 V_{R} , reverse voltage (V)

IFSM, peak forward surge current (A)



Revision History

Date	Revision	Description of Changes
15-May-2011	0	Original Data Sheet
27-Jun-2016 1		Format update

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