

Glass Passivated Ultrafast Rectifier

Reverse Voltage 800 to 1000V

Forward Current 1.0A

Features

- High temperature metallurgically bonded construction
- Plastic package has Underwriters Laboratory Flammability Classification 94V-0.
- Cavity-free glass passivated junction
- Ultrafast recovery time for high efficiency
- Low forward voltage, high current capability
- Capable of meeting environmental standards of MIL-S-19500
- Low leakage current • High surge current capability
- Specified reverse surge capability
- High temperature soldering guaranteed: 350°C/10 seconds, 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

Mechanical Data

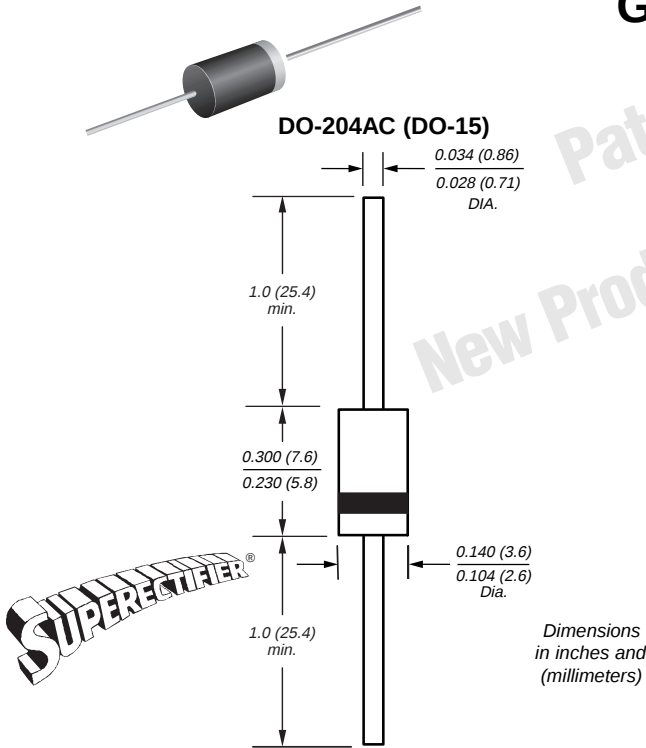
Case: JEDEC DO-204AC, molded plastic over glass body

Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.015 ounce, 0.4 gram



*Glass-plastic encapsulation technique is covered by Patent No. 3,996,602 and brazed-lead assembly by Patent No. 3,930,306.

Maximum Ratings & Thermal Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	BYV26DGP	BYV26EGP	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	800	1000	V
Maximum RMS voltage	V _{RMS}	560	700	V
Maximum DC blocking voltage	V _{DC}	800	1000	V
Maximum average forward rectified current 0.375" (9.5mm) lead length (See Fig. 1)	I _{F(AV)}	1.0		A
Peak forward surge current 10ms single half sine-wave superimposed on rated load	I _{FSM}	30		A
Non repetitive peak reverse energy (Note 1)	E _{RSM}	10		mj
Typical thermal resistance (Note 2,3)	R _{θJA}	70		°C/W
	R _{θJL}	16		
Operating junction and storage temperature range	T _J , T _{STG}	−65 to +175		°C

Electrical Characteristics

Ratings at 25°C ambient temperature unless otherwise specified.

Parameter	Symbol	BYV26DGP	BYV26EGP	Unit
Minimum avalanche breakdown voltage at 100μA	V _{BR}	900	1100	V
Maximum instantaneous forward voltage at 1.0A T _J = 25°C T _J = 175°C	V _F	2.5 1.3		V
Maximum DC reverse current at rated DC blocking voltage T _A = 25°C T _A = 165°C	I _R	5.0 150		μA
Max. reverse recovery time at I _F =0.5A, I _R =1.0A, I _{rr} =0.25A	t _{rr}	75		ns
Typical junction capacitance at 4.0V, 1MHz	C _J	15		pF

Notes: (1) Peak reverse energy measured at I_R = 400mA, T_J = T_J max. on inductive load, t = 20μs
(2) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, mounted on P.C.B. with 0.5 x 0.5" (12 x 12mm) copper pads
(3) Thermal resistance from junction to lead at 0.375" (9.5mm) lead length with both leads attached to heatsink

BYV26DGP and BYV26EGP

Glass Passivated Ultrafast Rectifier

Ratings and Characteristic Curves ($T_A = 25^\circ\text{C}$ unless otherwise noted)

