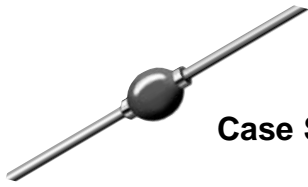


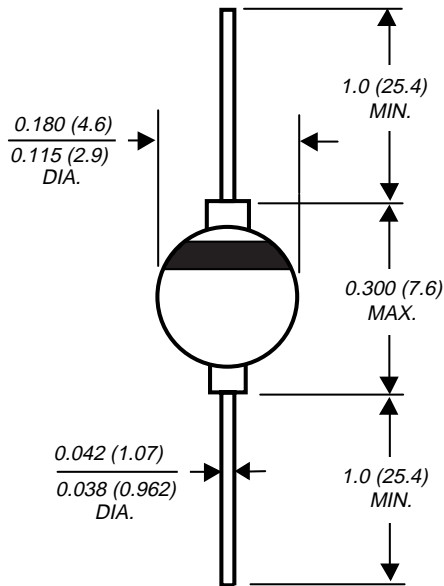
Glass Passivated Ultrafast Rectifier

Reverse Voltage 50 to 200V

Forward Current 3.0A



Case Style G4



Dimensions in inches and (millimeters)

* Brazed-lead assembly is covered by Patent No. 3,930,306

Patented*

Features

- High temperature metallurgically bonded construction
- Cavity-free glass passivated junction
- Superfast recovery time for high efficiency
- Low forward voltage, high current capability
- Capable of meeting environmental standards of MIL-S-19500
- Hermetically sealed package
- Low leakage current
- High surge current capability
- High temperature soldering guaranteed:
350°C/10 seconds, 0.375" (9.5mm) lead length,
5 lbs. (2.3kg) tension

Mechanical Data

Case: Solid glass body

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

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight: 0.037 ounce, 1.04 grams

Maximum Ratings and Thermal Characteristics (T_A = 25°C unless otherwise noted)

Parameter	Symbol	FE3A	FE3B	FE3	FE3D	Unit
Maximum repetitive peak reverse voltage	V _{RRM}	50	100	150	200	V
Maximum RMS voltage	V _{RMS}	35	70	105	140	V
Maximum DC blocking voltage	V _{DC}	50	100	150	200	V
Maximum average forward rectified current 0.375" (9.5mm) lead length at T _A = 55°C	I _{F(AV)}	3.0				A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I _{FSM}	125				A
Typical thermal resistance (Note 1,2)	R _{θJA} R _{θJL}	55 20				°C/W
Operating junction and storage temperature range	T _J , T _{STG}	-65 to +175				°C

Electrical Characteristics (T_A = 25°C unless otherwise noted)

Parameter	Symbol	FE3A	FE3B	FE3	FE3D	Unit
Maximum instantaneous forward voltage at 3.0A	V _F	0.95				V
Maximum DC reverse current at rated DC blocking voltage T _A = 25°C T _A = 100°C	I _R	5.0 50				μA
Maximum reverse recovery time at I _F = 0.5A, I _R = 1.0A, I _{rr} = 0.25A	t _{rr}	35				ns
Typical junction capacitance at 4V, 1MHz	C _J	100				pF

Notes:

- (1) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length and mounted on P.C.B. with 0.5 x 0.5 (12 x 12mm) copper pads.
- (2) Thermal resistance from junction to lead at 0.375" (9.5mm) lead length with both leads attached to heatsinks.

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Ratings and Characteristic Curves (T_A=25°C unless otherwise noted.)

