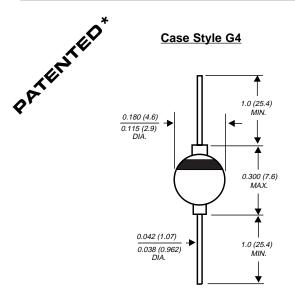
FE6A THRU FE6D

GLASS PASSIVATED FAST EFFICIENT RECTIFIER

Reverse Voltage - 50 to 200 Volts

Forward Current - 6.0 Amperes



Dimensions in inches and (millimeters)

FEATURES

- ♦ High temperature metallurgically bonded construction
- ♦ Glass passivated cavity-free 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 ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

	0.44504.0	5504	5505	5500	5500	
	SYMBOLS	FE6A	FE6B	FE6C	FE6D	UNITS
Maximum repetitive peak reverse voltage	VRRM	50	100	150	200	Volts
Maximum RMS voltage	V _{RMS}	35	70	105	140	Volts
Maximum DC blocking voltage	V _{DC}	50	100	150	200	Volts
Maximum average forward rectified current 0.375" (9.5mm) lead length at T _L =55°C	I _(AV)	6.0				Amps
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	IFSM	135.0				Amps
Maximum instantaneous forward voltage at 6.0A	VF	0.975			Volts	
Maximum DC reverse current TA=25°C at rated DC blocking voltage TA=100°C	IR	5.0 50.0			μΑ	
Maximum reverse recovery time (NOTE 1)	t _{rr}	35.0			ns	
Typical junction capacitance (NOTE 2)	CJ	100.0			pF	
Typical thermal resistance (NOTE 3, 4)	R⊕ja R⊕jl	55.0 18.0			°C/W	
Operating junction and storage temperature range	TJ, TSTG	-65 to +175				°C

NOTES

- (1) Reverse recovery test conditions: $I_F=0.5A$, $I_R=1.0A$, $I_{rr}=0.25A$
- (2) Measured at 1.0 MHz and applied reverse voltage of 4.0 Volts
- (3) Thermal resistance from junction to lead at 0.375" (9.5mm) lead length with both leads attached to heatsinks
- (4) Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length and mounted on P.C.B.



^{*} Brazed lead assembly is covered by Patent No. 3,930,306

RATINGS AND CHARACTERISTIC CURVES FE6A THRU FE6D

FIG. 1 - MAXIMUM FORWARD CURRENT **DERATING CURVE** 9.0 RESISTIVE OR INDUCTIVE LOAD AVERAGE FORWARD RECTIFIED CURRENT, AMPERES 7.5 6.0 0.375" (9.5mm) 4.5 3.0 1.5 0 0 25 50 100 125 150 75 LEAD TEMPERATURE, °C

