

RFC2K THRU RFC4K

HIGH VOLTAGE FAST RECOVERY RECTIFIER

VOLTAGE: 2000-3000V

CURRENT: 0.2A

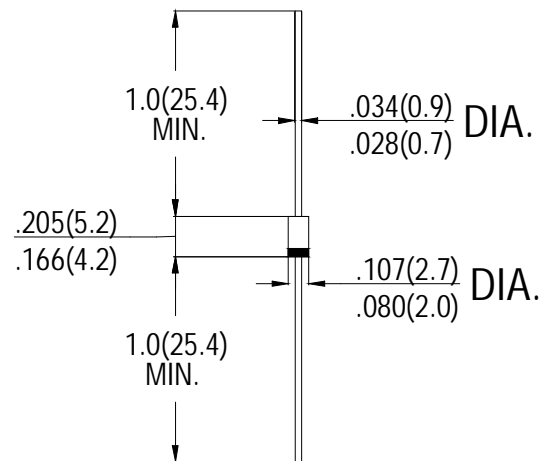
FEATURES

- fast switching
- Low leakage
- high current capability
- high surge capability
- High reliability

MECHANICAL DATA

- **Case:** Molded plastic
- **Epoxy:** UL94V-0 rate flame retardant
- **Lead:** MIL-STD- 202E, Method 208 guaranteed
- **Polarity:** Color band denotes cathode end
- **Mounting position:** Any
- **Weight:** 0.35 grams

DO-41



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Single phase, half wave, 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

	SYMBOL	RFC2K	RFC3K	RFC4K	units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	2000	3000	4000	V
Maximum RMS Voltage	V_{RMS}	1400	2100	2800	V
Maximum DC Blocking Voltage	V_{DC}	2000	3000	4000	V
Maximum Average Forward rectified Current at $T_A=50^\circ\text{C}$	I_o	0.2			A
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rate load (JEDEC method)	I_{FSM}	30			A
Maximum Forward Voltage Drop per element at 0.2A DC	V_F	4.0	5.0	6.5	V
Maximum DC Reverse Current at Rated DC Blocking Voltage	@ $T_A=25^\circ\text{C}$	5.0			μA
	@ $T_A=100^\circ\text{C}$	100			
Maximum Full Load Reverse Current Average, Full Cycle .375"(9.5mm) lead length at $T_I=75^\circ\text{C}$	I_R	30			
Typical Junction Capacitance (Note)	C_J	30			pF
Maximum Reverse Recovery Time (Note)	t_{rr}	500			nS

Notes: Measured at 1MHz and applied reverse voltage of 4.0 volts