

High Voltage Surface Mount Fast Recovery Rectifiers

R4000F~R4001F

Features

- ◆ The plastic package carries Underwriters Laboratory Flammability Classification 94V-0
- ◆ Fast switching for high efficiency
- ◆ Open-Junction chip ,silastic passivated
- ◆ Low reverse leakage
- ◆ High forward surge current capability
- ◆ High temperature soldering guaranteed
250°C/10 seconds at terminals

Mechanical Data

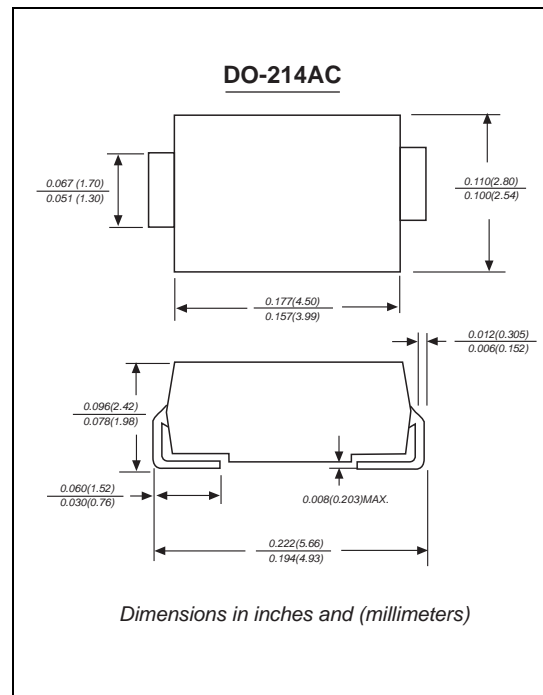
Case: JEDEC DO-214AC molded plastic body

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Color band denotes cathode end

Mounting Position: Any

Weight : 0.002 ounce, 0.07grams



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 current derate by 20%.

	SYMBOLS	R4000F	R4001F	UNITS
Maximum repetitive peak reverse voltage	V_{RRM}	2800	4000	VOLTS
Maximum RMS voltage	V_{RMS}	1960	2800	VOLTS
Maximum DC blocking voltage	V_{DC}	2800	4000	VOLTS
Maximum average forward rectified current at $T_L=75^\circ C$	$I_{(AV)}$	0.2		Amp
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30.0		Amps
Maximum instantaneous forward voltage at 0.2A	V_F	5.0		Volts
Maximum DC reverse current $T_A = 25^\circ C$ at rated DC blocking voltage $T_A = 100^\circ C$	I_R	5.0 50.0		μA
Maximum reverse recovery time (Note 1)	T_{rr}	500		ns
Operating junction and storage temperature range	T_J, T_{STG}	-50 to +155		$^\circ C$

Note: 1.Reverse recovery time test condition: $I_F=0.5A$ $I_R=1.0A$ $I_{rr}=0.25A$

Ratings And Characteristic Curves

R4000F THRU R4001F

FIG. 1- FORWARD CURRENT DERATING CURVE

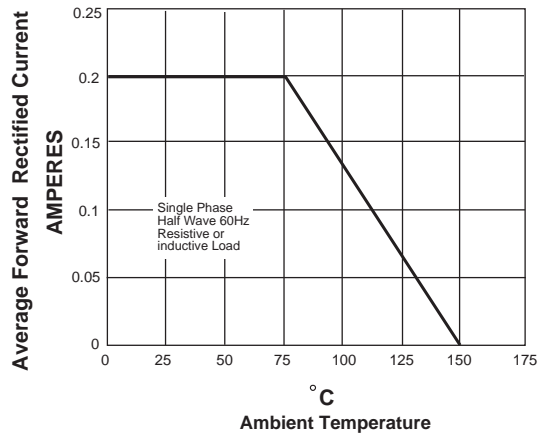


FIG. 2-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

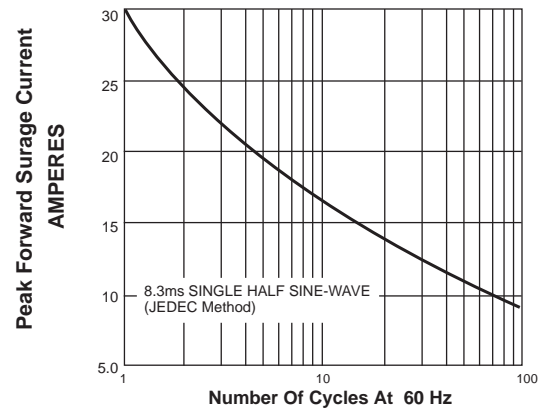


FIG. 3-TYPICAL INSTANTANEOUS FORWARD CHARACTERISTICS

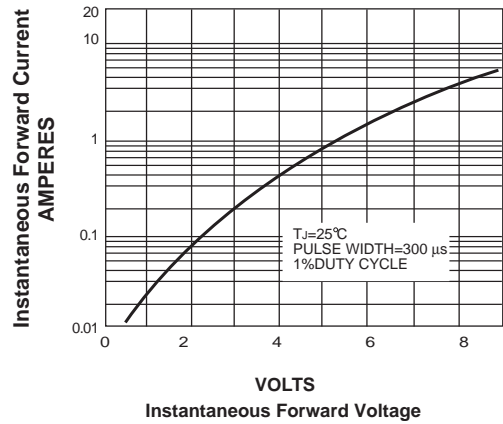


FIG. 4-TYPICAL REVERSE CHARACTERISTICS

