

High Voltage Rectifier Diodes

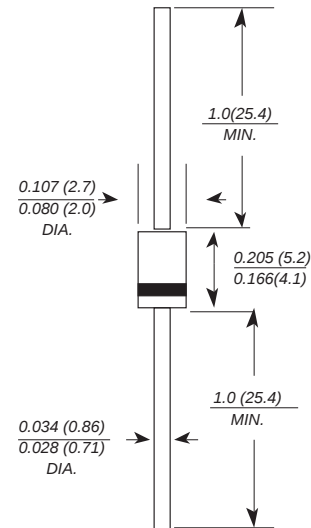
Features

- Low cost
- Low leakage
- Low forward voltage drop
- High current capability
- Easily cleaned with alcohol, Isopropanol and similar solvents

Mechanical Data

- Case: D O - 4 1 Molded Plastic
- Terminals: Plated Leads Solderable per MIL-STD-202, Method 208
- Polarity: Cathode Band
- Weight: 0.34 grams (approx.)
- Mounting Position: Any
- Marking: Type Number

DO-41



Dimensions in inches and (millimeters)

Maximum Ratings $T_A = 25^\circ\text{C}$ unless otherwise specified

Characteristic		Symbols	RFC2K	RFC3K	RFC4K	Units
Peak Repetitive Reverse Voltage		V_{RRM}				
Working Peak Reverse Voltage		V_{RWM}	2000	3000	4000	V
DC Blocking Voltage		V_R				
RMS Reverse Voltage		$V_{R(RSM)}$	1400	2100	2800	V
Average Output Current (Note 1)	@ $T_L = 50^{\circ}C$	I_o	200			mA
Non-Repetitive Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)		I_{FSM}	30			A
Forward Voltage	@ $I_F = 200mA$	V_{FM}	4.0	5.0	6.5	V
Peak Reverse Leakage Current at Rated DC Blocking Voltage	@ $T_A = 25^{\circ}C$	I_{RM}	5.0			uA
	@ $T_A = 100^{\circ}C$		100			
Typical Junction Capacitance (Note 2)		C_J	30			pF
Maximum Reverse Recovery Time (Note 3)		T_{RR}	500			nS
Operating and Storage Temperature Range		T_J, T_{STG}	-65 to +150			$^{\circ}C$

Notes: 1. Valid provided that leads are kept at ambient temperature at a distance of 9.5mm from the case.

2. Measured at 1.0MHz and applied reverse voltage of 4.0V DC.

3. Test Conditions: $I_F = 0.5\text{A}$, $I_R = 1.0\text{A}$, $I_{RR} = 0.25\text{A}$

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

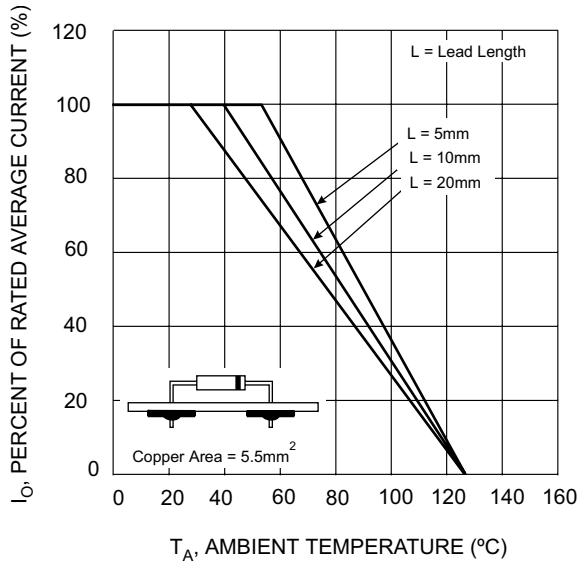


Fig. 1 Current Derating for Various Lead Lengths

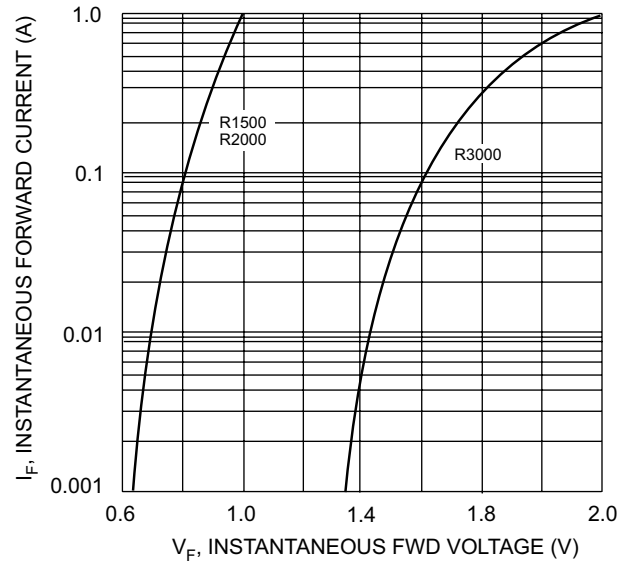


Fig. 2 Typical Forward Characteristics

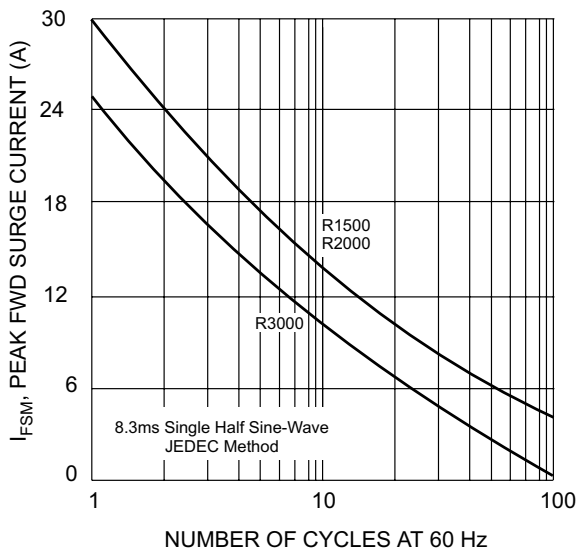


Fig. 3 Peak Fwd Surge Current vs # of Cycles @ 60 Hz

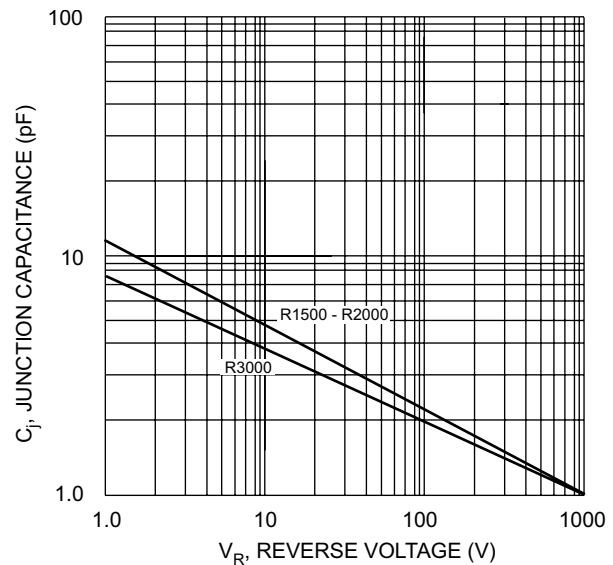


Fig. 4 Typical Junction Capacitance

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