R4000F THRU R5000F

HIGH VOLTAGE FAST RECOVERY RECTIFIERS Reverse Voltage – 4000 to 5000 V Forward Current – 0.2 A

Features

- Fast switching
- · Low leakage
- Low forward voltage drop
- High current capability
- High current surge
- High reliability

DO-15

Dimensions in mm

Absolute Maximum Ratings and Characteristics

Ratings at 25 °C ambient temperature unless otherwise specified. Single phase, half wave, 60 Hz, resistive or inductive load. For capacitive load, derate current by 20 %.

Parameter	Symbols	R4000F	R5000F	Units
Maximum Recurrent Peak Reverse Voltage	V _{RRM}	4000	5000	V
Maximum RMS Voltage	V _{RMS}	2800	3500	V
Maximum DC Blocking Voltage	V _{DC}	4000	5000	V
Maximum Forward Voltage at 0.2 A	V _F	6.5		V
Maximum Average Forward Rectified Current 375" (9.5 mm) Lead Length at $T_a = 50 ^{\circ}C$	I _{F(AV)}	0.2		А
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	30		A
Maximum DC Reverse Current at Rated DC Blocking Voltage at T _a = 25 °C	5		5	μA
Maximum Full Load Reverse Current Average, Full Cycle 0.375" (9.5 mm) Lead Length at T_L = 55 °C	IR	100		
Maximum Reverse Recovery Time 1)	Trr	500		ns
Operating and Storage Temperature Range	T _j , T _{stg}	- 55 to + 150		°C

¹⁾ Reverse recovery test conditions $I_F = 0.5 A$, $I_R = 1 A$, $I_{RR} = 0.25 A$.





FIG. 3 - TEST CIRCUIT DIAGRAM AND REVERSE RECOVERY TIME CHARACTERISTIC



