SF61 THRU SF66

SUPER FAST RECTIFIER

Reverse Voltage - 50 to 400 V

Forward Current - 6 A

Features

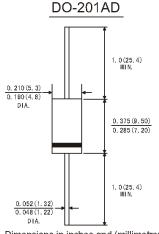
- · Low forward voltage drop
- · High current capability
- · High reliability
- · High surge current capability

Mechanical Data

 Case: JEDEC DO-201AD molded plastic body • Terminals: Plated axial leads, solderable per MIL-STD-750, method 2026 guaranteed

• Polarity: Color band denotes cathode end

• Mounting Position: Any



Dimensions in inches and (millimetrers)

Maximum Ratings and Electrical 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	SF61	SF62	SF63	SF64	SF65	SF66	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	V
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	V
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	V
Maximum Average Forward Rectified Current 0.375"(9.5 mm) Lead Length at T _A = 55 °C	I _{F(AV)}	6						А
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	150						А
Maximum Forward Voltage at 5 A	V _F	0.975 1.3				.3	V	
Maximum DC Reverse Current $T_A = 25$ °C at Rated DC Blocking Voltage $T_A = 100$ °C	I _R	5 100						μA
Maximum Reverse Recovery Time 1)	t _{rr}	35						ns
Typical Junction Capacitance 2)	CJ	50						pF
Typical Thermal Resistance	$R_{\theta JA}$	20					°C/W	
Operating and Storage Temperature Range	T_J,T_S	- 65 to + 150						°C

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







²⁾ Measured at 1 MHz and applied reverse voltage of 4 Volts..

FIG.1-MAXIMUM AVERAGE FORWARD CURRENT DERATING

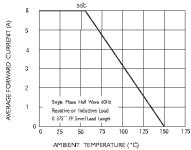


FIG.3-TYPICAL FORWARD CHARACTERISTICS

FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

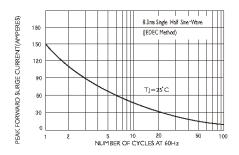
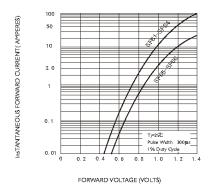


FIG.4-TYPICAL REVERSE CHARACTERISTICS



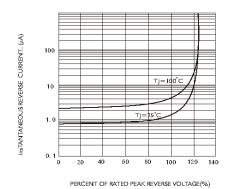
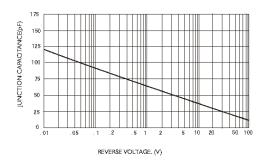


FIG.5-TYPICAL JUNCTION CAPACITANCE











Dated: 14/07/2008 J