

SF61 THRU SF66

SUPER FAST RECTIFIER

Reverse Voltage - 50 to 400 V

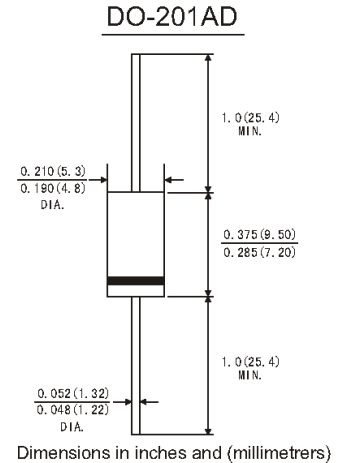
Forward Current - 6 A

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



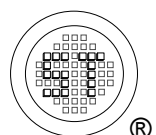
Maximum Ratings and Electrical Characteristics

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						A
Peak Forward Surge Current 8.3 ms Single Half Sine-wave Superimposed on Rated Load (JEDEC Method)	I _{FSM}	150						A
Maximum Forward Voltage at 5 A	V _F	0.975				1.3		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⁾	C _J	50						pF
Typical Thermal Resistance	R _{θJA}	20						°C/W
Operating and Storage Temperature Range	T _J , T _{Stg}	- 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..



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FIG.1-MAXIMUM AVERAGE FORWARD CURRENT DERATING

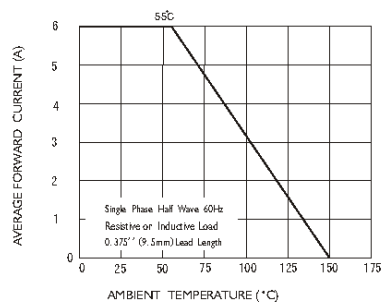


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

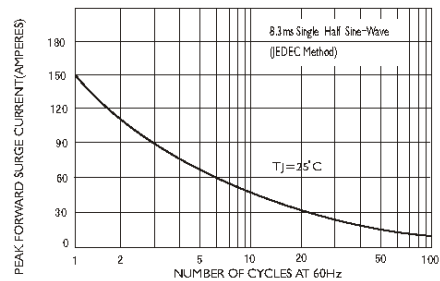


FIG.3-TYPICAL FORWARD CHARACTERISTICS

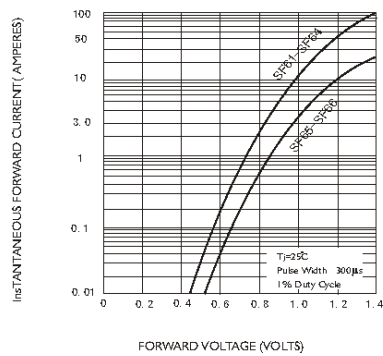


FIG.4-TYPICAL REVERSE CHARACTERISTICS

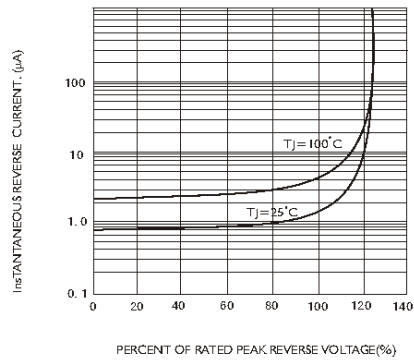


FIG.5-TYPICAL JUNCTION CAPACITANCE

