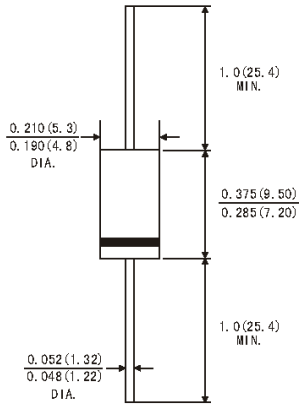
SF61 THRU SF66

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

DO-201AD



Dimensions in inches and (millimetrers)

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	$R_{\theta JA}$	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 A, I_R = 1 A, I_{RR} = 0.25 A.
[2] Measured at 1 MHz and applied reverse voltage of 4 Volts..

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FIG.1-MAXIMUM AVERAGE FORWARD CURRENT DERATING

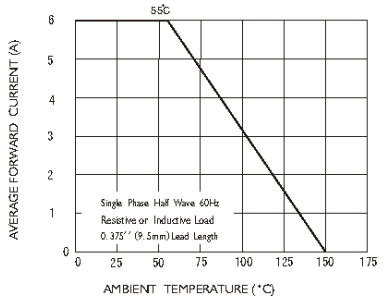

FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

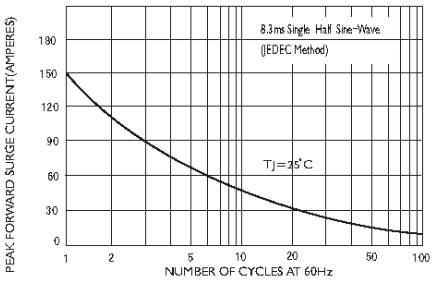

FIG.3-TYPICAL FORWARD CHARACTERISTICS

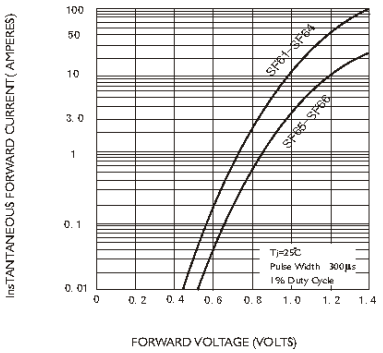

FIG.4-TYPICAL REVERSE CHARACTERISTICS

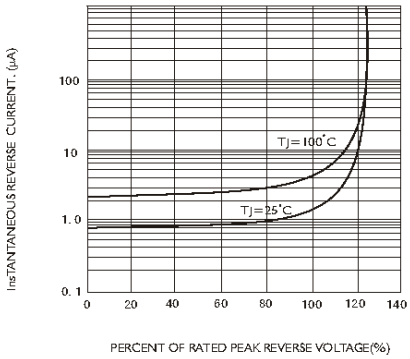

FIG.5-TYPICAL JUNCTION CAPACITANCE