

SF51G THRU SF58G

GLASS PASSIVATED SUPERFAST RECOVERY RECTIFIERS

Reverse Voltage - 50 to 600 V

Forward Current - 5 A

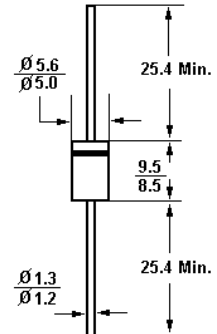
Features

- Low forward voltage drop
- High current capability
- Super fast switching speed
- High forward surge capability
- Glass passivated junction

Mechanical Data

- **Case:** DO-201AD molded plastic body
- **Polarity:** Color band denotes cathode end
- **Mounting Position:** Any

DO-201AD



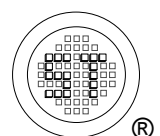
Dimnsions in mm

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 current derate by 20%.

Parameter	Symbols	SF51G	SF52G	SF53G	SF54G	SF55G	SF56G	SF57G	SF58G	Unit
Maximum Repetitive Peak Reverse Voltage	V _{RRM}	50	100	150	200	300	400	500	600	V
Maximum RMS Voltage	V _{RMS}	35	70	105	140	210	280	350	420	V
Maximum DC Blocking Voltage	V _{DC}	50	100	150	200	300	400	500	600	V
Maximum Average Forward Current T _A = 50 °C	I _{F(AV)}	5								A
Peak Forward Surge Current 8.3 ms Half Sine-wave Superimposed on Rated Load (JEDEC method)	I _{FSM}	150								A
Maximum Instantaneous Forward Voltage at 5 A	V _F	0.95				1.3		1.7		V
Maximum DC Reverse Current at Rated DC Blocking Voltage T _a = 25 °C T _a = 125 °C	I _R	5 50								µA
Maximum Reverse Recovery Time ¹⁾	t _{rr}	35								ns
Typical Thermal Resistance, Junction to Ambient	R _{θJA}	30								°C/W
Typical Thermal Resistance, Junction to Lead	R _{θJL}	10								°C/W
Operating Junction Temperature Range	T _j	- 55 to + 150								°C
Storage Temperature Range	T _{stg}	- 55 to + 150								°C

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



SF51G THRU SF58G

