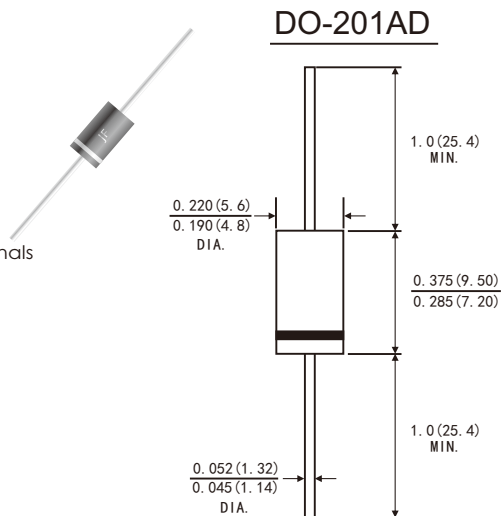


FEATURES

- Low forward voltage drop
- High current capability
- High reliability
- High surge current capability
- Lead (Pb)-free component
- Component in accordance to RoHS 2011/65/EU
- High temperature soldering guaranteed:260°C/10 seconds at terminals

MECHANICAL DATA

- Case: JEDEC DO-201AD molded plastic body
- Terminals: Plated axial leads, solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.041ounce, 1.15 grams



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbols	SF 31	SF 32	SF 33	SF 34	SF 35	SF 36	SF 37	SF 38	Units
Maximum Repetitive Peak Reverse Voltage	V_{RRM}	50	100	150	200	300	400	500	600	Volts
Maximum RMS Voltage	V_{RMS}	35	70	105	140	210	280	350	420	Volts
Maximum DC Blocking Voltage	V_{DC}	50	100	150	200	300	400	500	600	Volts
Maximum Average Forward Rectified Current 0.375" (9.5mm)Lead Length@T _A =55°C	$I_{(AV)}$	3.0								Amps
Peak Forward Surge Current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	80								Amps
Maximum Instantaneous Forward Voltage at 3.0 A	V_F	0.95			1.3			1.7		Volts
Maximum DC Reverse Current At Rated DC Blocking Voltage	T _A =25°C	5.0								μA
	T _A =100°C									
Maximum Reverse Recovery Time(Note1)	T_{rr}	35								ns
Typical Thermal Resistance (NOTE3)	$R_{\theta JA}$	35								°C/W
Operating Temperature Range	T_J	-55 to+150								°C
Storage Temperature Range	T_{STG}	-55 to+150								°C

Note: 1.Reverse Recovery Test conditions: I_F=0.5A,I_R=1.0A,I_{RR}=0.25A.

2.Measured at 1MHz and applied reverse voltage of 4.0 Volts.

3.Mount on Cu-Pad Size 16mmX16mm on PCB.

RATINGS AND CHARACTERISTIC CURVES SF31 THRU SF38

FIG.1-MAXIMUM AVERAGE FORWARD CURRENT DERATING

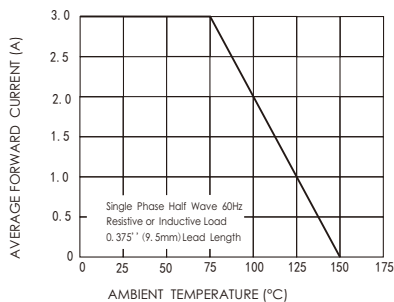


FIG.2-MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

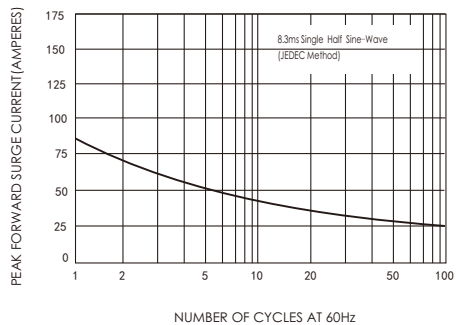


FIG.3-TYPICAL FORWARD CHARACTERISTICS

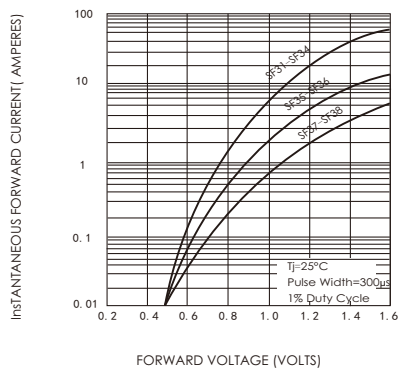


FIG.4-TYPICAL REVERSE CHARACTERISTICS

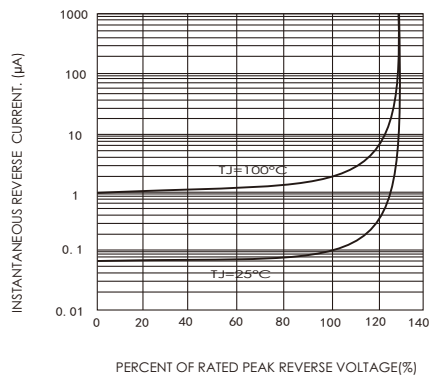


FIG.5-TYPICAL JUNCTION CAPACITANCE

