SEMICONDUCTOR

1N5400 THRU 1N5408

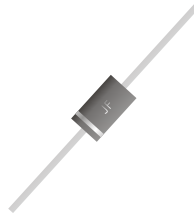
GENERAL PURPOSE PLASTIC RECTIFIER

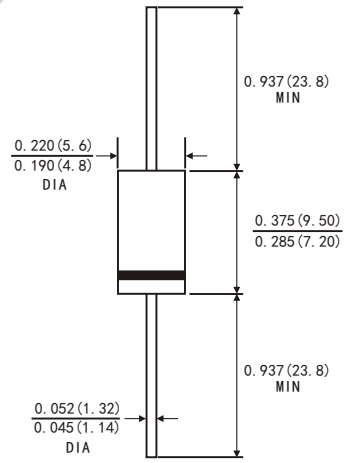
Reverse Voltage - 50 to 1000 Volts
Forward Current -3.0Amperes

FEATURES

- The plastic package has Underwrites Laboratory Flammability Classification 94V-0
- Construction utilizes void-free molded plastic technique
- High surge current capability
- High temperature soldering guaranteed: 260°C/10 seconds at terminals 0.375"(9.5mm) lead length,5lbs.(2.3kg)tension
- Component in accordance to RoHS 2011/65/EU

DO-201AD





Dimensions in inches and (millimetrers)

MECHANICAL DATA

- Case: JEDEC DO-201AD molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end
- Mounting Position: Any
- Weight: 0.042ounce, 1.19 grams

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

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

	Symbols	1N 5400	1N 5401	1N 5402	1N 5403	1N 5404	1N 5405	1N 5406	1N 5407	1N 5408	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	300	400	500	600	800	1000	Volts
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	350	420	560	700	Volts
Maximum DC Blocking Voltage to T_A=105°C	V_{DC}	50	100	200	300	400	500	600	800	1000	Volts
Maximum average Forward Rectified Current	$I_{(AV)}$	3.0									Amps
Peak Forward Surge Current (8.3ms half sine-wave superimposed on rated load (JEDEC method)	I_{FSM}	125									Amps
Maximum Instantaneous Forward Voltage at 3.0 A	V_F	1.0									Volts
Maximum Reverse current at rated DC Blocking Voltage T_A=25°C	I_R	5									μA
Maximum Reverse current at rated DC Blocking Voltage T_A=125°C		100									
Typical Thermal Resistance (Note 2)	$R_{\theta JA}$	25									°C/W
Typical Junction Capacitance (Note 1)	C_J	50.0									pF
Operating and Storage temperature Range	T_J T_{STG}	-55 to+150									°C

Note: 1.Measured at 1MHz and applied reverse voltage of 4.0V DC.

2.Thermal resistance from junction to ambient and from junction to lead at 0.375"(9.5mm)lead length , P.C.B. mounted

RATINGS AND CHARACTERISTIC CURVES 1N5400 THRU 1N5408

FIG.1-FORWARD CURRENT DERATING CURVE

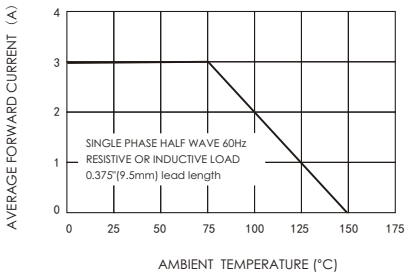


FIG.2-TYPICAL INSTANTANEOUS FORWARD VOLTAGE.(V)

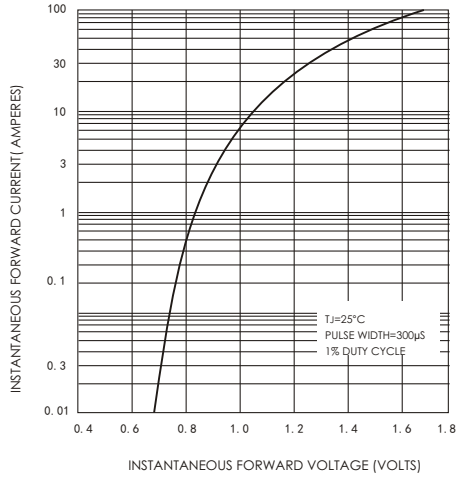


FIG.3-MAXIMUM NON-REPETITIVE PEAK FORWARD SURGE CURRENT

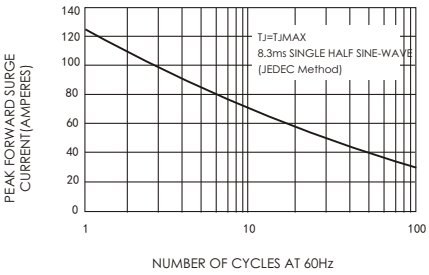


FIG.4-TYPICAL REVERSE CHARACTERISTICS

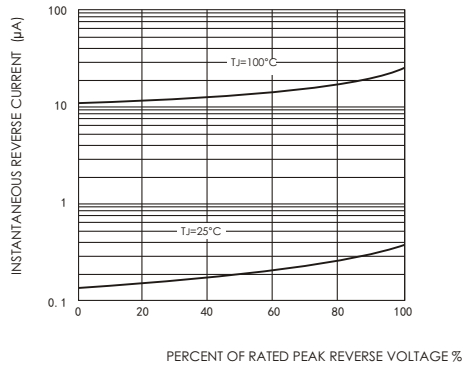


FIG.5-TYPICAL JUNCTION CAPACITANCE