SOCAY

General Standard Diodes

1N4001~1N4007 | **50 to 1000 V** | **DO-41**

Features

- The plastic package carries Underwrites Laboratory Flammability Classification 94V-0.
- Construction utilizes void-free molded plastic technique.
- Low reverse leakage.
- High forward surge current capability.
- High temperature soldering guaranteed:250 C/10 seconds, 0.375"(9.5mm) lead length, 5lbs.(2.3kg).

DO-41

Mechanical Date

- Case: JEDEC DO-41 molded plastic body
- Terminals: Lead solderable per MIL-STD-750,method 2026
- Polarity: Color band denotes cathode end.
- Mounting position: Any.
- Weight: 0.012ounce, 0.33 gram.

Maximum Ratings and Electrical Characteristics

Ratings at 25℃ ambient temperature unless otherwise specified. Single phase, half wave 60Hz, resistive or inductive load.

For capacitive load, derate current by 20%.

Type Number		Symbol	1N4001	1N4002	1N4003	1N4004	1N4005	1N4006	1N4007	Unit
Maximum Recurrent Peak Reverse Voltage		V_{RRM}	50	100	200	400	600	800	1000	V
Maximum RMS Voltage		V_{RMS}	35	70	140	280	420	560	700	V
Maximum DC Blocking Voltage		V_{DC}	50	100	200	400	600	800	1000	V
Maximum Average Forward Rectified Current 0.375"(9.5mm) Lead Length at T_A=75℃		$I_{(AV)}$	1							A
Peak Forward Surge Current, 8.3ms half sine-wave superimposed on rated load (JEDEC method) T_A=75℃		I_{FSM}	30							A
Maximum Instantaneous Forward Voltage at 1.0A		V_F	1							V
Maximum Reverse Current at Rated DC Blocking Voltage	T_A=25℃	I_R	5							μA
	T_A=100℃		50							
Typical Thermal Resistance (Note 2)		$R_{\theta JA}$	50							℃/W
		$R_{\theta JL}$	25							
Typical Junction Capacitance (Note 1)		C_J	15							pF
Maximum DC Blocking Voltage Temperature		T_A	+150							℃
Operating and Storage Temperature Range		T_J,T_{STG}	-50 to +175							℃

Notes: 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.

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Rating and Characteristic Curves

Fig1. Forward Current Derating Curve

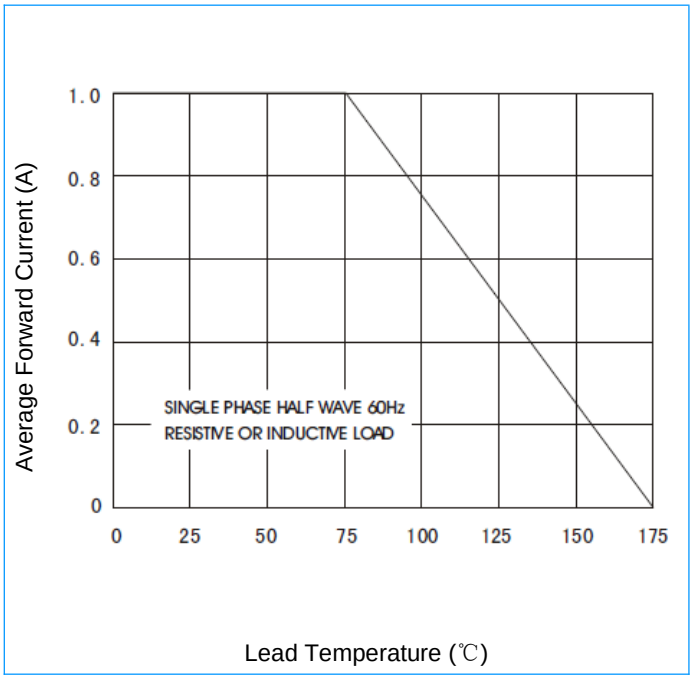


Fig2. Typical Forward Characteristics

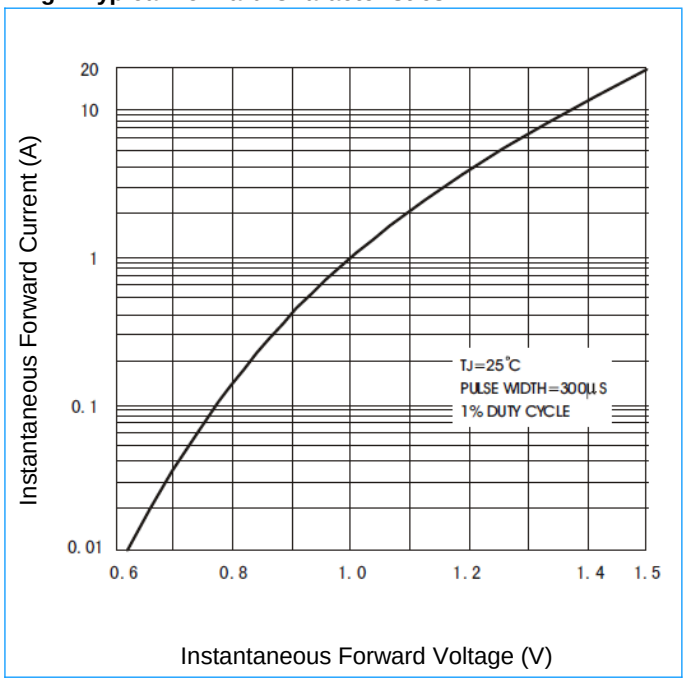


Fig3. Maximum Non-Repeitive Peak Forward Surge Current

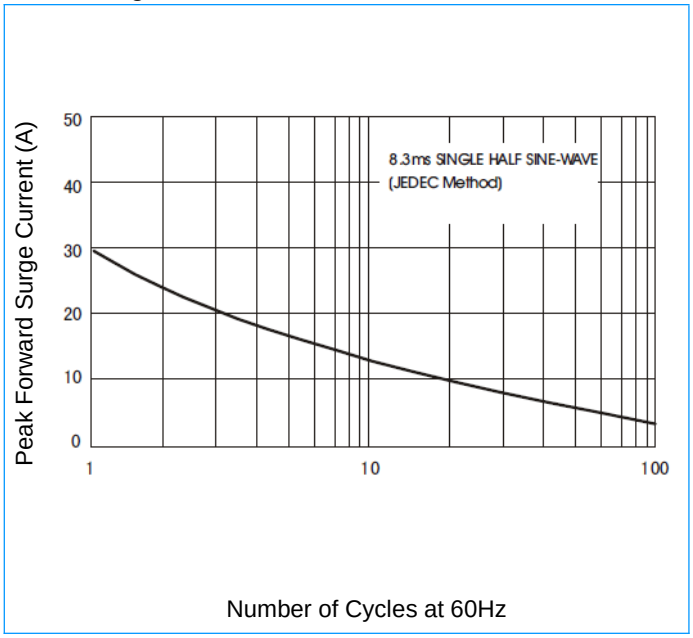
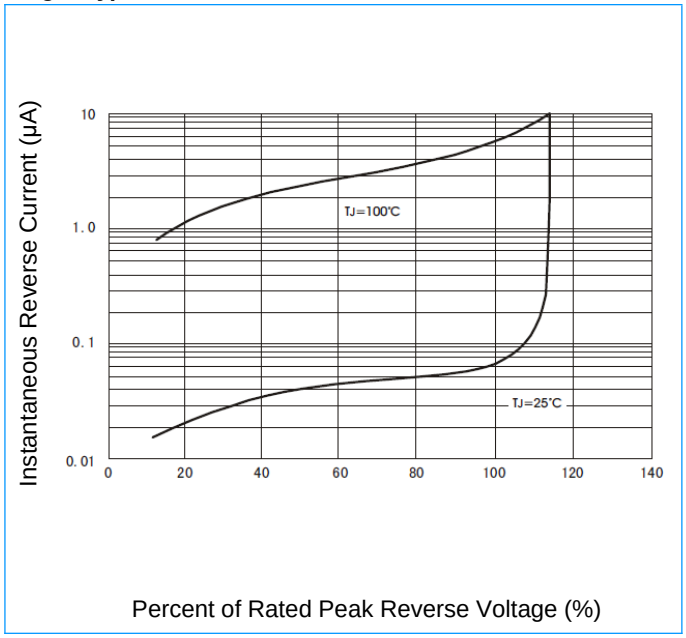


Fig4. Typical Reverse Characteristics



General Standard Diodes

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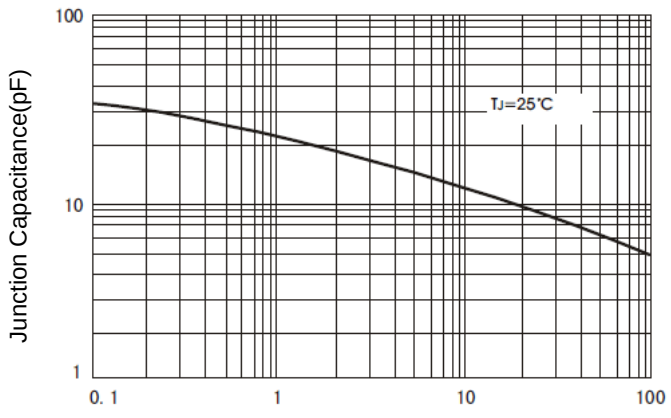
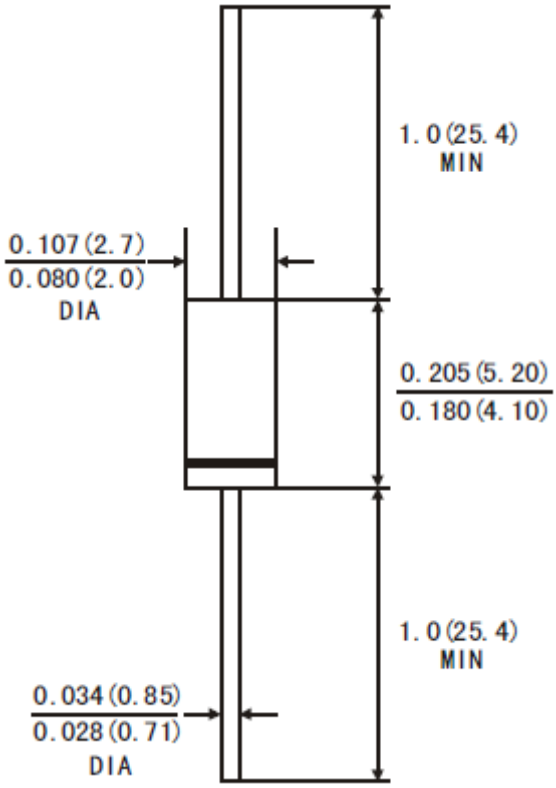
Rating and Characteristic Curves (Continue)

Fig5. Typical Junction Capacitance



DO-41 Package Outline (Dimensions in inches and (millimeters))

DO-41



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Packaging Information

Part Number	Component Package	Quantity
IN4001~IN4007	DO-41	5000 PCS