

1N4001A thru 1N4007A

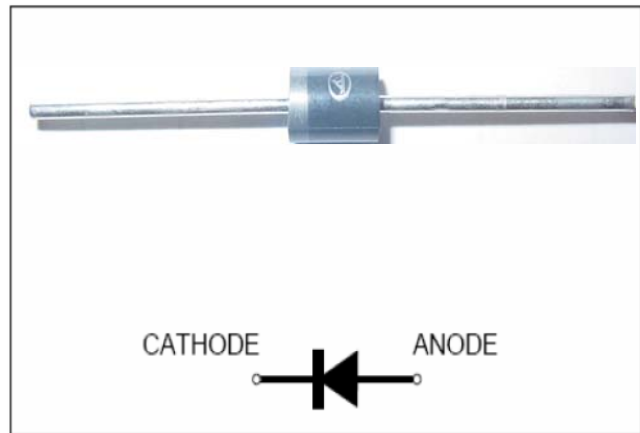
General Purpose Plastic Rectifiers Reverse Voltage 50 to 1000V Forward Current 1.0A

Feature & Dimensions

- * Plastic package has Underwriters Laboratories Flammability Classification 94V-0
- * Construction utilizes void-free molded plastic technique
- * Low reverse leakage
- * High forward surge capability
- * Glass passivated chip
- * High temperature soldering guaranteed:
260°C/10 seconds
- * 0.375" (9.5mm) lead length, 5 lbs. (2.3kg) tension

Mechanical Data

Case: JEDEC DO-41, molded plastic body
Terminals: Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity: Color band denotes cathode end
Mounting Position: Any
Weight: 0.011 oz., 0.284 g
Handling precaution: None



We declare that the material of product compliance with ROHS requirements

Electrical Characteristic

1. Maximum & Thermal Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	1N4 001A	1N4 002A	1N4 003A	1N4 004A	1N4 005A	1N4 006A	1N4 007A	Unit
Maximum repetitive 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 $T_A = 75^\circ\text{C}$	$I_F(AV)$	1.0							A
Peak forward surge current 8.3ms single half sine-wave superimposed on rated load (JEDEC Method)	I_{FSM}	30							A
Typical thermal resistance (Note 1)	$R_{\theta JA}$	50							°C/W
Operating junction and storage temperature range	T_J, T_{STG}	-50 to +125							°C

Electrical Characteristics Ratings at 25°C ambient temperature unless otherwise specified.

Parameter Symbol	symbol	1N4 001A	1N4 002A	1N4 003A	1N4 004A	1N4 005A	1N4 006A	1N4 007A	Unit
Maximum instantaneous forward voltage at 1.0A	V_F	1.10							V
Maximum DC reverse current $T_A = 25^\circ\text{C}$ at rated DC blocking voltage $T_J = 125^\circ\text{C}$	I_R	5.0							μA
Typical junction capacitance at 4.0V, 1MHz	C_J	15							PF

NOTES:

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

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2. Characteristic Curves (TA = 25°C unless otherwise noted)

Fig. 1 - Forward Current Derating Curve

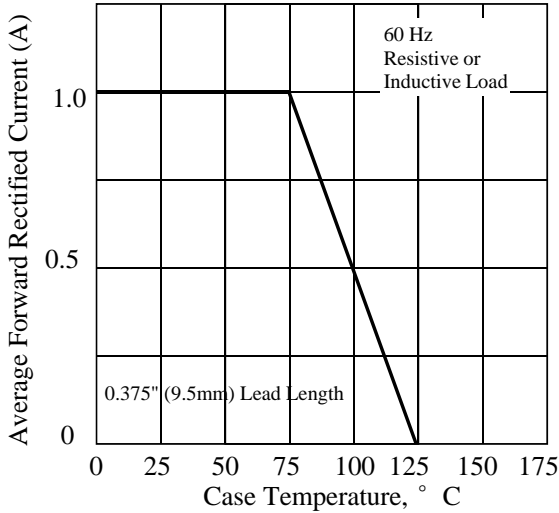


Fig. 2 - Maximum Non-repetitive Peak Forward Surge Current

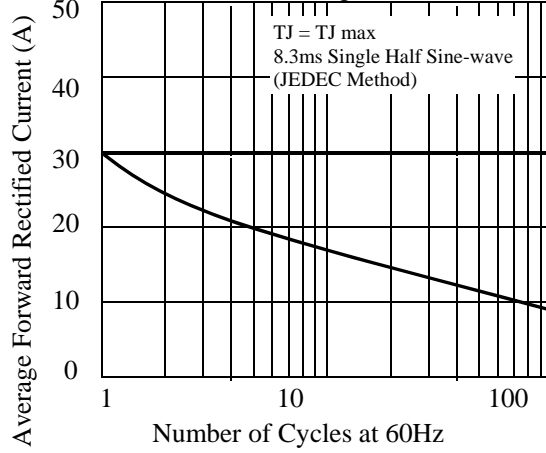


Fig. 3 - Typical Instantaneous Forward Characteristics

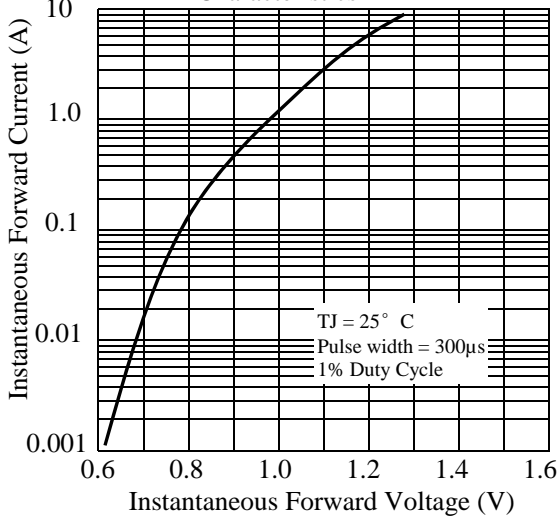


Fig. 4 - Typical Reverse Characteristics

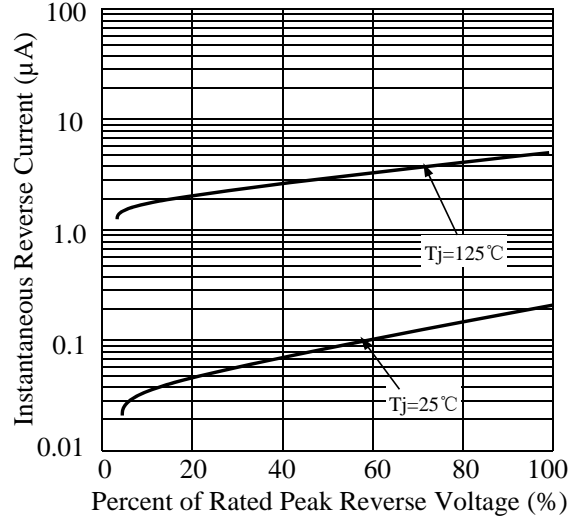


Fig. 5 - typical transient thermal impedance

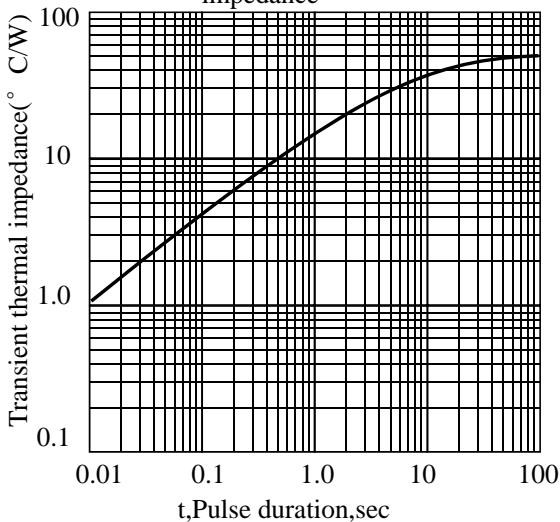
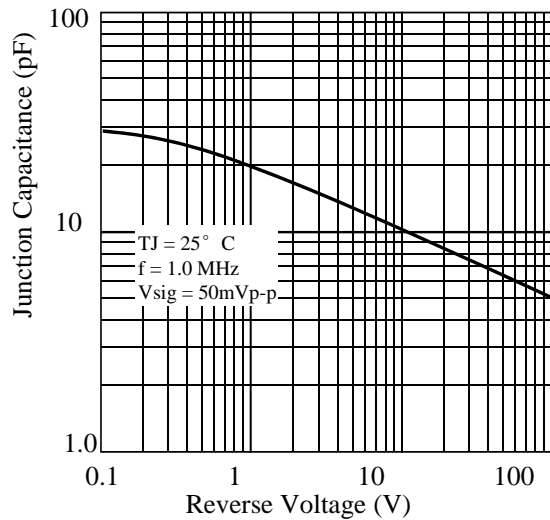
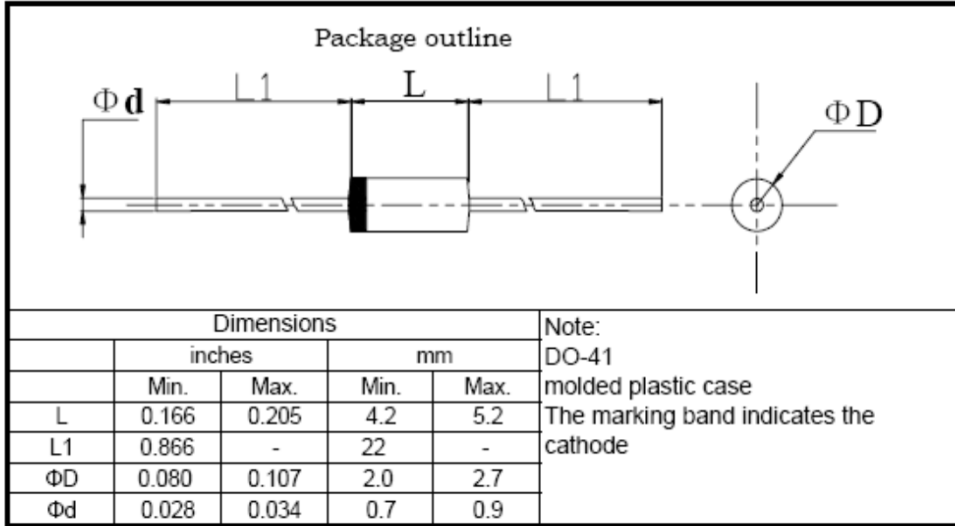


Fig. 6 - Typical Junction Capacitance



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3. dimension:



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4. Update Record

版次	更新记录	更新作者	更新日期
1	第一版	谭志伟	2017-11-2