



1N4007P

Glass Passivated Standard Rectifier

Features

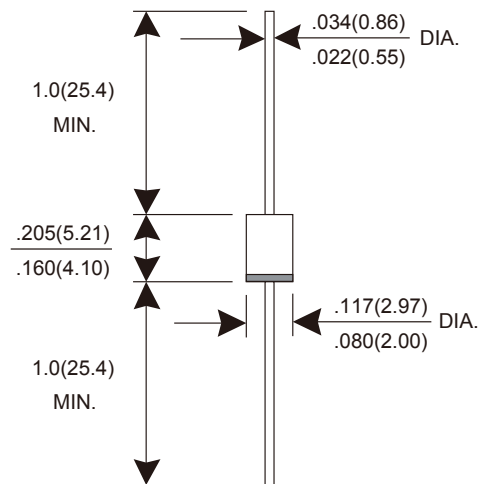
- * Low forward voltage drop
- * High current capability
- * Low reverse leakage current
- * High surge current capability

Mechanical Data

- * Case: Molded plastic, DO-41
- * Epoxy: UL 94V-0 rate flame retardant
- * Terminals: Solderable per MIL-STD-202, method 208
- * Polarity: Color band denotes cathode end
- * Mounting position: Any

Voltage 1600 Volt
Current 1.0 Ampere

DO-41



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%.

PARAMETER	SYMBOL	VALUE	UNIT
Maximum repetitive peak reverse voltage	V_{RRM}	1600	V
Maximum RMS voltage	V_{RMS}	1120	V
Maximum DC blocking voltage	V_{DC}	1600	V
Maximum average forward rectified current @ $T_A=50^\circ\text{C}$	$I_{F(AV)}$	1.0	A
Peak forward surge current 8.3 ms single half sine-wave superimposed on rated load	I_{FSM}	30	A
Maximum instantaneous forward voltage @ $I_F=1.0\text{A}$	V_F	1.1	V
Maximum DC reverse current @ $T_A=25^\circ\text{C}$ at rated DC blocking voltage @ $T_A=100^\circ\text{C}$	I_R	5 200	μA
Typical thermal resistance from junction to ambient	$R_{\theta JA}$	50	$^\circ\text{C/W}$
Operating junction and storage temperature range	T_J, T_{STG}	-55 to +150	$^\circ\text{C}$

RATINGS AND CHARACTERISTICS CURVES

Fig.1 - Forward Current Derating Curve

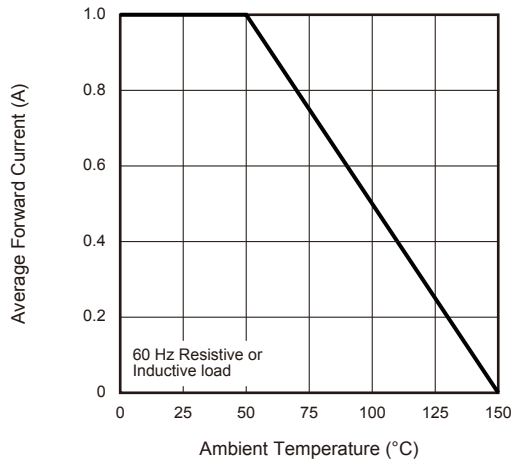


Fig.2 - Maximum Non-Repetitive Peak Forward Surge Current

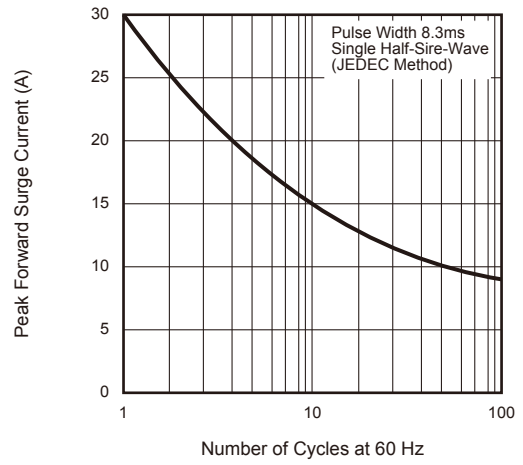


Fig.3 - Typical Instantaneous Forward Characteristics

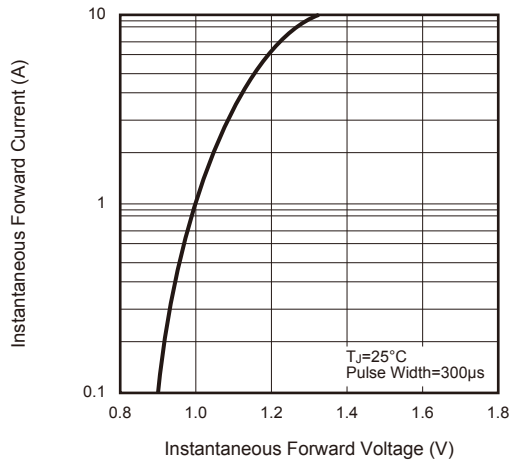
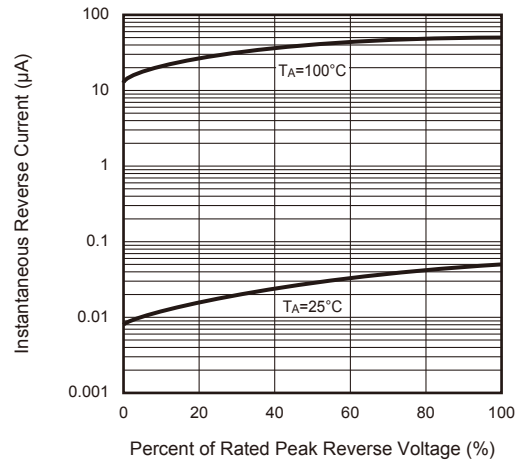


Fig.4 - Typical Reverse Leakage Characteristics



ORDERING INFORMATION

Part Number	Marking Code	Package	Quantity	Delivery Mode
1N4007P	1N4007P	DO-41	5,000	Tape & Ammo box
1N4007P	1N4007P	DO-41	5,000	Tape & Reel