

General Purpose Plastic Rectifier (Discontinued)

Features

- The plastic package carries Underwriters 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,
5 lbs. (2.3kg) tension



DO-204AL

Mechanical Data

Case:	JEDEC DO-204AL molded plastic body
Terminals:	Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity:	Color band denotes cathode end
Mounting Position:	Any
Weight:	0.012 ounce, 0.3 gram

Maximum Ratings and Electrical Characteristics ($T_A=25^\circ\text{C}$ unless noted otherwise)

Symbol	Description	1N4006	Unit	Conditions
V_{RRM}	*Maximum Repetitive Peak Reverse Voltage	800	V	
V_{RMS}	*Maximum RMS Voltage	560	V	
V_{DC}	*Maximum DC Blocking Voltage	800	V	
I_{F(AV)}	*Maximum Average Forward Rectified Current	1.0	A	0.375" (9.5mm) lead length $T_A=75^\circ\text{C}$
I_{FSM}	*Peak Forward Surge Current	30	A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)
V_F	Maximum Instantaneous Forward Voltage	1.1	V	$I_F=1.0\text{A}$
I_{R(AV)}	*Maximum Full Load Reverse Current,	30	μA	Full Cycle Average 0.375"(9.5mm) lead length at $T_L=75^\circ\text{C}$

General Semiconductor

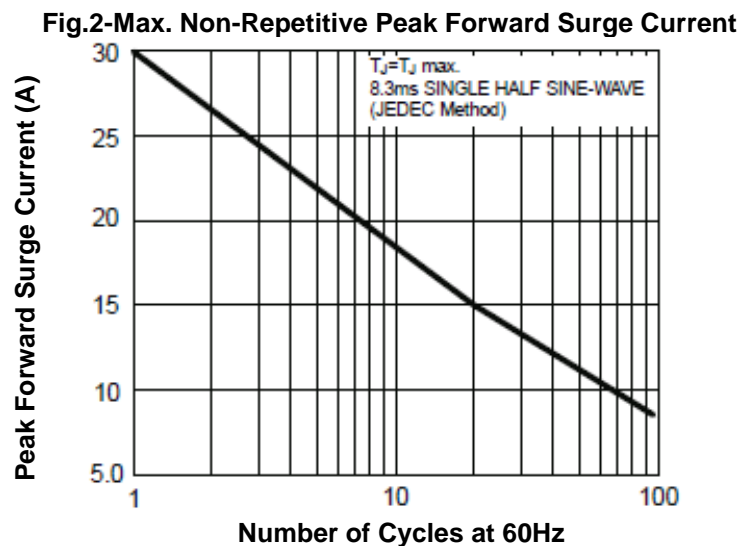
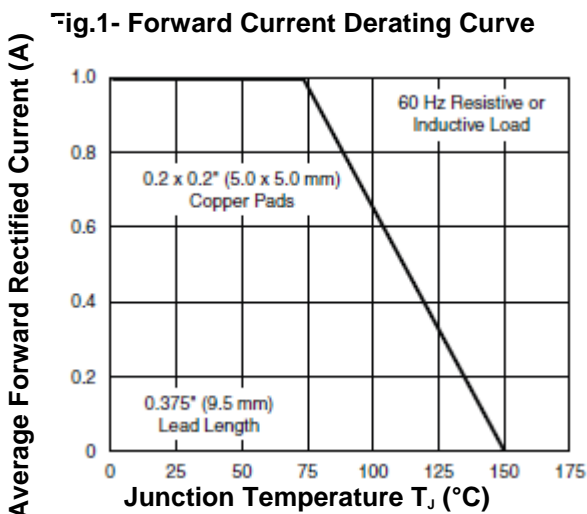
Symbol	Description	1N4006	Unit	Conditions
IR	*Maximum DC Reverse Current at Rated DC Blocking Voltage	5.0	μA	TA=25°C
		50		TA=100°C
Trr	Typical Reverse Recovery Time	30	μs	Note 1
CJ	Typical Junction Capacitance	15	pF	Note 2
RthJA	Typical Thermal Resistance	50	°C / W	Note 3
RthJL		25		
TA	Maximum DC Blocking Voltage Temperature	+150	°C	
TJ, TSTG	Operating Junction and Storage Temperature Range	-50 to +150	°C	

Notes:

- 1: Measured on Tektronix Type "S" recovery plug-in. Tektronix 545 Scope or equivalent, $I_{FM}=20mA$, $I_{RM}=1mA$.
- 2: Measured at 1.0MHz and applied reverse voltage of 4.0V
- 3: Thermal resistance from junction to ambient and from junction to lead at 0.375" (9.5mm) lead length, P.C.B. mounted.

*JEDEC Registered Values

Typical Characteristics Curves ($T_A=25°C$ unless noted otherwise)



General Semiconductor

Fig.3- Typical Instantaneous Forward Characteristics

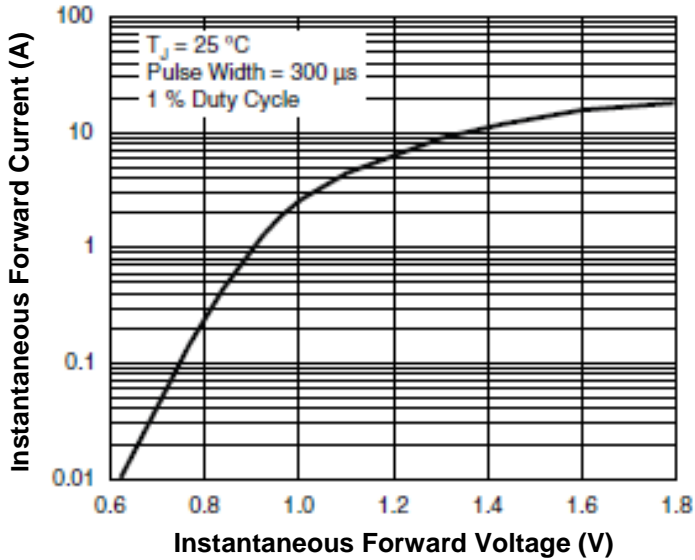


Fig.4-Typical Reverse Characteristics

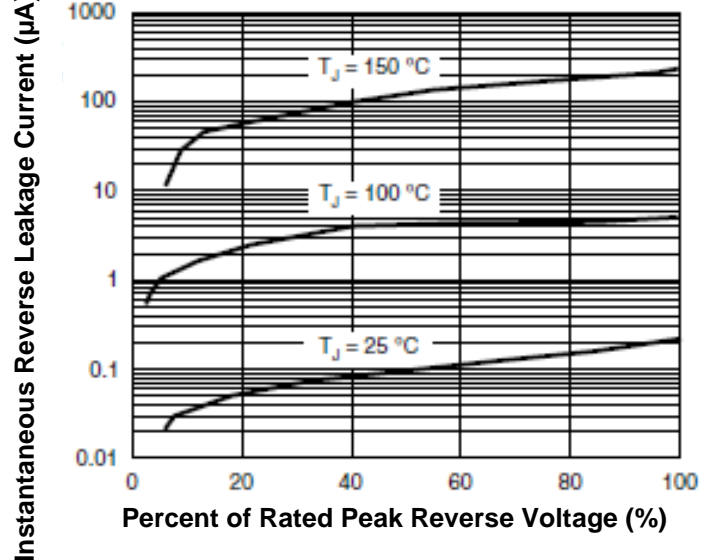


Fig.5- Typical Junction Capacitance

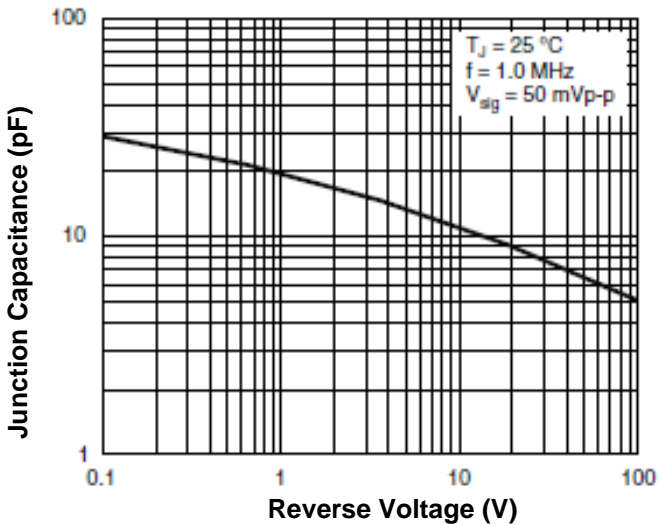
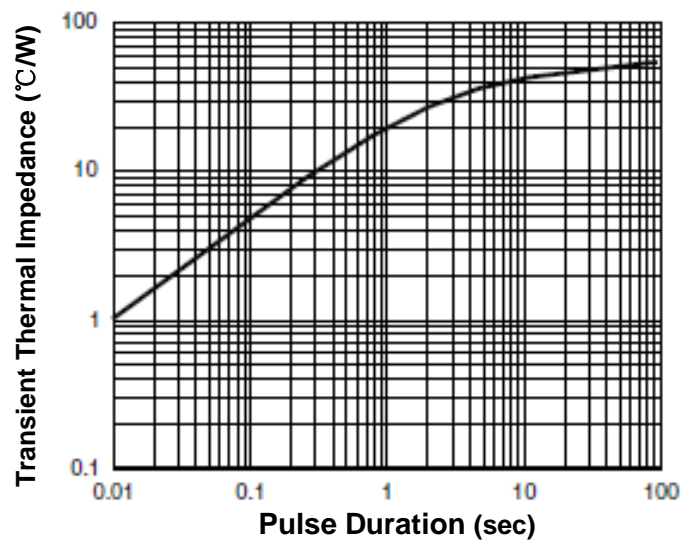
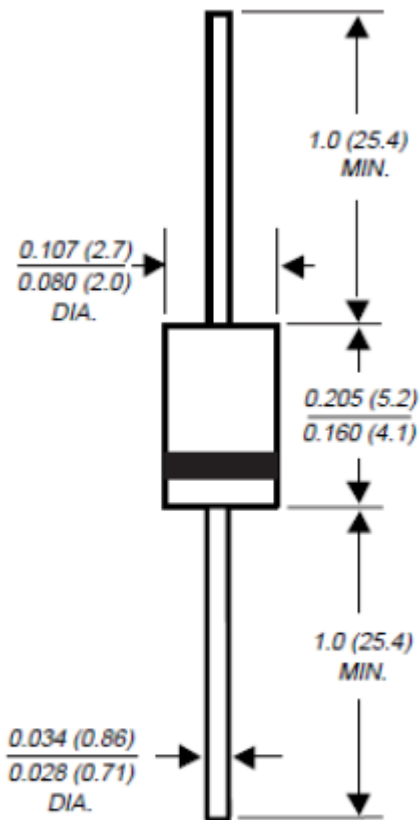


Fig.6-Typical Transient Impedance



Dimensions in inch (mm)



DO-204AL

Order Information

Part # to order	Manufacturer	Outline	Packing	RoHS Status
1N4006/4-GSI-T30	General Semiconductor	DO-204AL	13" Tape and Reel	NO

General Semiconductor

How to contact us

USA HEADQUARTERS

28040 WEST HARRISON PARKWAY, VALENCIA, CA 91355-4162

Tel: (800)-TAITRON (800)-824-8766 (661)-257-6060

Fax: (800)-TAITFAX (800)-824-8329 (661)-257-6415

Email: taitron@taitroncomponents.comHttp://www.taitroncomponents.com**TAITRON COMPONENTS INCORPORATED TAIWAN BRANCH**

6F., NO.190, SEC. 2, ZHONGXING RD., XINDIAN DIST., NEW TAIPEI CITY 23146, TAIWAN R.O.C.

Tel: 886-2-2913-6238

Fax: 886-2-2913-6239

TAITRON COMPONENT TECHNOLOG SHANGHAI CORPORATION

SUITE 1503, METROBANK PLAZA, 1160 WEST YAN'AN ROAD, SHANGHAI, 200052, CHINA

Tel: +86-21-5424-9942

Fax: +86-21-2302-5027