

Glass Passivated Junction Rectifier (Discontinued)

Features

- Plastic package has Underwriters Laboratory Flammability 94V-0
- High temperature metallurgically bonded construction
- Capable of meeting environmental standards of MIL-S-19500
- 1.5 Ampere operation at $T_A=70^{\circ}\text{C}$ with no thermal runaway
- Glass passivated cavity-free junction
- Typical IR less than $0.1\mu\text{A}$
- High temperature soldering guaranteed:
350°C/10 seconds, .037" (9.5mm) lead length,
5lbs (2.3kg) tension



DO-204AC

Mechanical Data

Case:	JEDEC DO-204AC molded plastic over glass body
Terminals:	Plated axial leads, solderable per MIL-STD-750, Method 2026
Polarity:	Color band denotes cathode end
Mounting Position:	Any
Weight:	0.015 ounce, 0.4 gram

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

Symbol	Description	1N53 91GP	1N53 93GP	1N63 94GP	1N53 95GP	1N53 96GP	1N53 97GP	1N53 98GP	Unit	Conditions
VRRM	*Maximum Repetitive Peak Reverse Voltage	50	200	300	400	500	600	800	V	
VRMS	*Maximum RMS Voltage	35	140	210	280	350	420	560	V	
VDC	Maximum DC Blocking Voltage	50	200	300	400	500	600	800	V	
IF(AV)	*Maximum Average Forward Rectified Current	1.5							A	0.375" (9.5 mm) lead length at $T_L=70^{\circ}\text{C}$
IFSM	*Peak Forward Surge Current	50.0							A	8.3ms single half sine-wave superimposed on rated load (JEDEC Method)
IR(AV)	*Maximum Full Load Reverse Current, Full Cycle Average	300.0							μA	0.375" (9.5 mm) lead length at $T_A=70^{\circ}\text{C}$

General Semiconductor

Symbol	Description	1N53 91GP	1N53 93GP	1N63 94GP	1N53 95GP	1N53 96GP	1N53 97GP	1N53 98GP	Unit	Conditions
V_F	Maximum Instantaneous Forward Voltage	1.4							V	IF=1.5A, TA=70°C
I_R	Maximum DC Reverse Current at Rated DC Blocking Voltage	5.0							μA	TA=25°C
		300.0								TA=150°C
T_{rr}	Typical Reverse Recovery Time	2.0							μs	Note 1
C_J	Typical Junction Capacitance	15.0							pF	Note 2
R_{thJA}	Typical Thermal Resistance	45.0							°C / W	Note 3
T_J, T_{STG}	*Operating Junction and Storage Temperature Range	-65 to +175							°C	

Notes:

- 1: Reverse recovery test condition: I_F=0.5A, I_R=1.0A, I_{rr}=0.25A.
- 2: Measured at 1.0MHz and applied reverse voltage of 4.0V
- 3: Thermal resistance from junction to ambient at 0.375" (9.5mm) lead length, P.C.B. mounted.

*JEDEC Registered Values

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

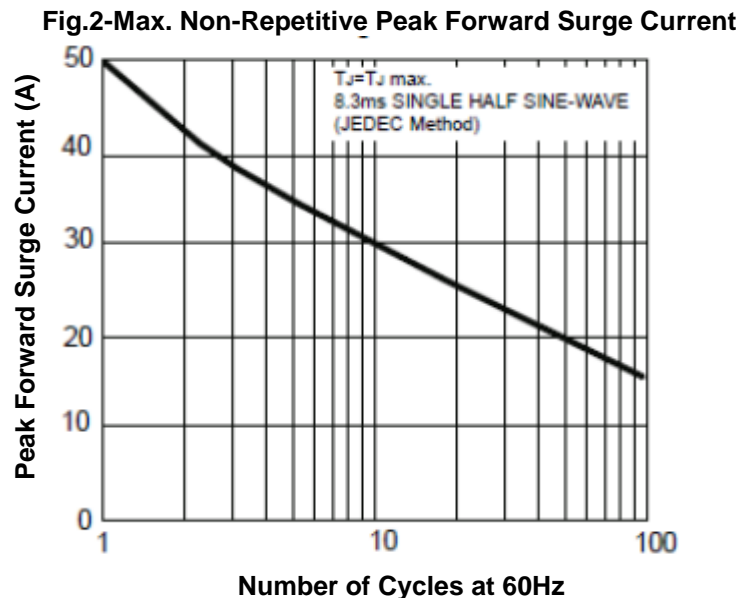
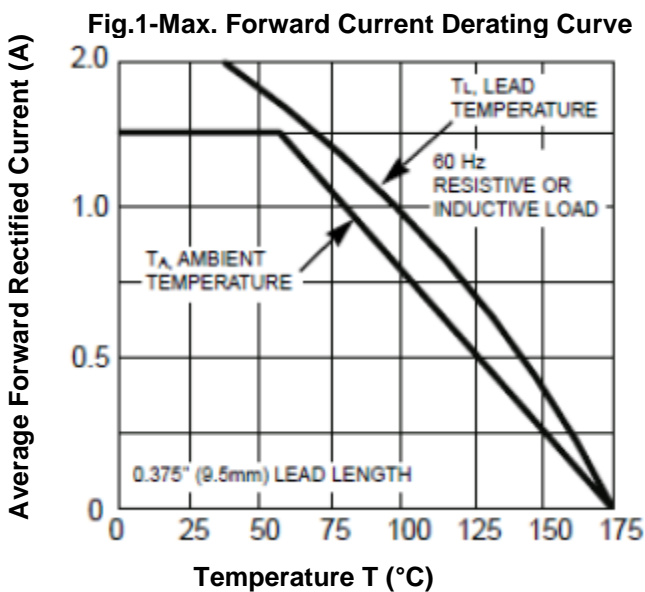


Fig.3- Typical Instantaneous Forward Characteristics

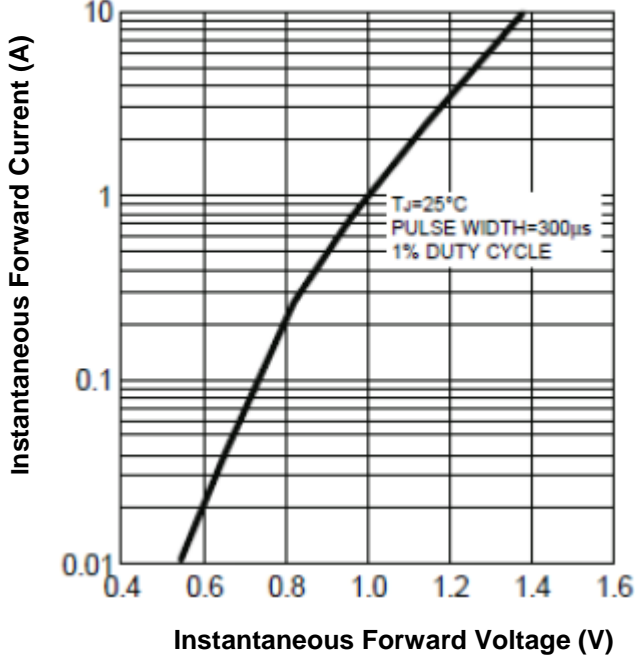


Fig.4-Typical Reverse Characteristics

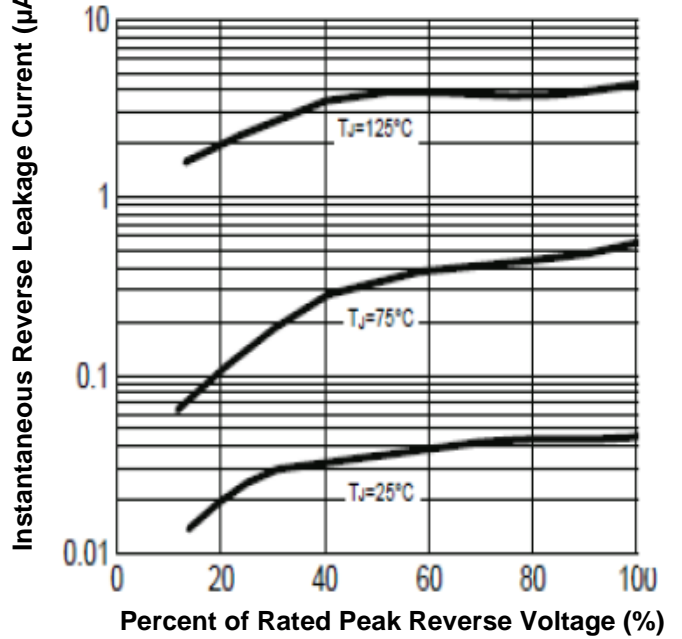


Fig.5- Typical Junction Capacitance

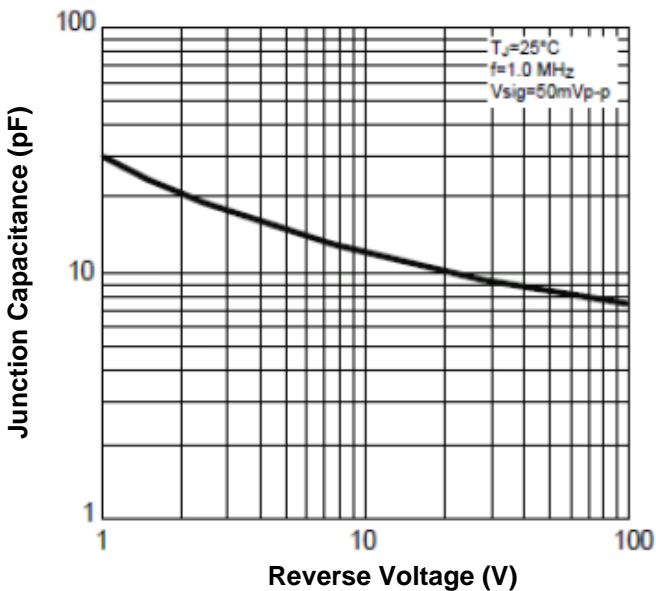
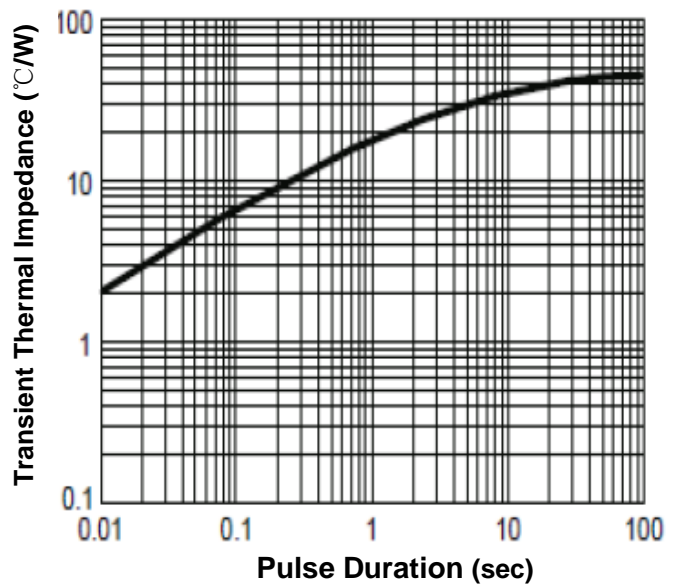
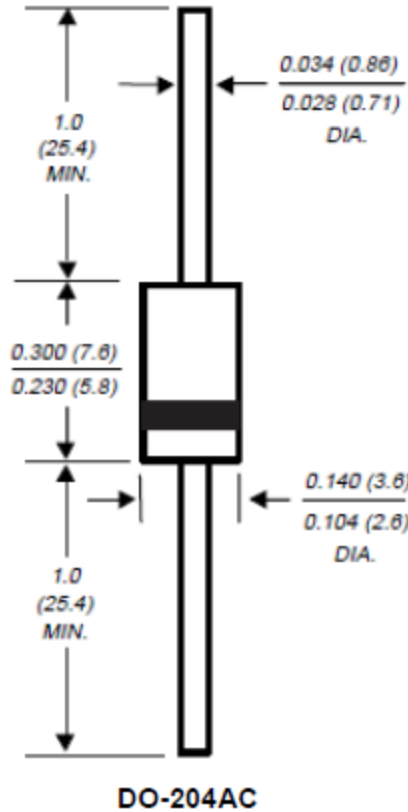


Fig.6-Typical Transient Impedance



Dimensions in inch (mm)



Order Information

Part # to order	Manufacturer	Outline	Packing	RoHS Status
1N5391GP/4-GSI-T30	General Semiconductor	DO-204AC	13" Tape and Reel	NO
1N5393GP/4-GSI-T30	General Semiconductor	DO-204AC	13" Tape and Reel	NO
1N5394GP/4-GSI-T30	General Semiconductor	DO-204AC	13" Tape and Reel	NO
1N5395GP/4-GSI-T30	General Semiconductor	DO-204AC	13" Tape and Reel	NO
1N5396GP/4-GSI-T30	General Semiconductor	DO-204AC	13" Tape and Reel	NO
1N5397GP/4-GSI-T30	General Semiconductor	DO-204AC	13" Tape and Reel	NO
1N5398GP/1-GSI-B	General Semiconductor	DO-204AC	Bulk	NO
1N5398GP/4-GSI-T30	General Semiconductor	DO-204AC	13" Tape and Reel	NO

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.com

Http://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