

CTC 1N4933S-1N4937S RECTIFIER Datasheet

<http://www.manuallib.com/ctc/1n4933s-1n4937s-rectifier-datasheet.html>

FEATURES

Fast switching for high efficiency

Glass passivated chip

Low reverse leakage current

Low forward voltage drop

High current capability

Plastic material has UL flammability classification 94V-0

ManualLib.com collects and classifies the global product instruction manuals to help users access anytime and anywhere, helping users make better use of products.

<http://www.manuallib.com>

1N4933S thru 1N4937S

FAST RECOVERY RECTIFIERS

REVERSE VOLTAGE - 50 to 600 Volts
FORWARD CURRENT - 1.0 Ampere

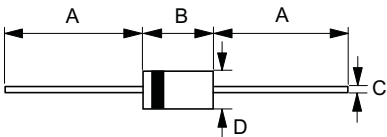
FEATURES

- Fast switching for high efficiency
- Diffused junction
- Low reverse leakage current
- Low forward voltage drop
- High current capability
- Plastic material has UL flammability classification 94V-0

MECHANICAL DATA

- Case : A-405 molded plastic
- Polarity : Color band denotes cathode
- Weight : 0.01 ounces, 0.3 grams
- Mounting position : Any

A-405



Dim.	A-405	
	Min.	Max.
A	25.4	-
B	4.10	5.20
C	0.53 $\varnothing$	0.64 $\varnothing$
D	2.00 $\varnothing$	2.70 $\varnothing$
All Dimensions in millimeter		

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

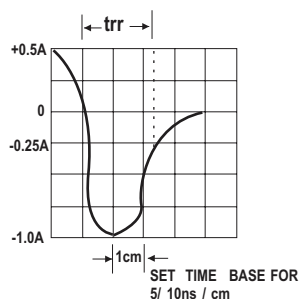
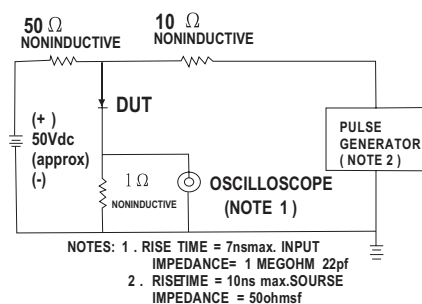
Ratings at 25°C ambient temperature unless otherwise specified.
Single phase, half wave, 60Hz, resistive or inductive load.
For capacitive load, derate current by 20%

CHARACTERISTICS	SYMBOL	1N4933S	1N4934S	1N4935S	1N4936S	1N4937S	UNIT
Maximum Recurrent Peak Reverse Voltage	VRRM	50	100	200	400	600	V
Maximum RMS Voltage	VRMS	35	70	140	280	420	V
Maximum DC Blocking Voltage	VDC	50	100	200	400	600	V
Maximum Average Forward Rectified Current @TA = 75°C	I(AV)	1.0					A
Peak Forward Surge Current 8.3ms single half sine-wave super imposed on rated load	IFSM	30					A
Maximum forward Voltage at 1.0A DC	VF	1.3					V
Maximum DC Reverse Current @TJ = 25°C	IR	5.0					uA
at Rated DC Blocking Voltage @TJ = 100°C		100					uA
Typical Reverse Recovery Time (Note 1)	TRR	200					ns
Typical Reverse Recovery Time (Note 2)	TRR	130					ns
Typical Junction Capacitance (Note 3)	CJ	15					pF
Typical Thermal Resistance (Note 4)	RθJA	50					°C/W
Operating Temperature Range	TJ	-55 to +150					°C
Storage Temperature Range	TSTG	-55 to +150					°C

NOTES : 1.Measured with IF=1.0A,VR=30V,di/dt=50A/us.
2.Measured with IF=0.5A,IR=1A,IRR=0.25A.
3.Measured at 1.0MHz and applied reverse voltage of 4.0V DC.
4.Thermal Resistance Junction to Ambient.

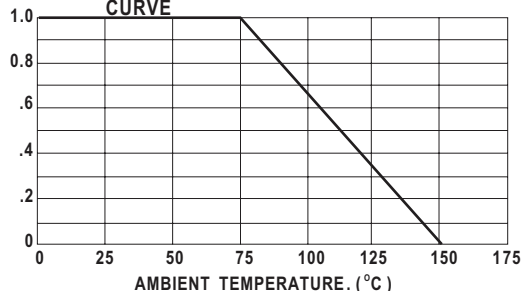
RATINGS AND CHARACTERISTIC CURVES

FIG. 1 -REVERSE RECOVERY TIME CHARACTERISTIC AND TEST CIRCUIT DIAGRAM



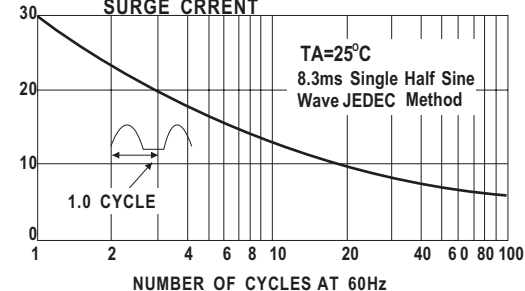
AVERAGE FORWARD RECTIFIED CURRENT
AMPERES.

FIG. 2- MAXIMUM FORWARD CURRENT DERATING
CURVE



PEAK FORWARD SURGE CURRENT
AMPERES

FIG. 3- MAXIMUM NON-REPETITIVE PEAK FORWARD
SURGE CURRENT



JUNCTION CAPACITANCE (pF)

FIG. 4- TYPICAL HUNCTION CAPACITANCE

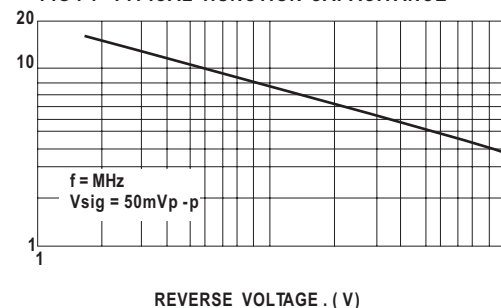


FIG. 5- TYPICAL FORWARD CHARACTERISTICS

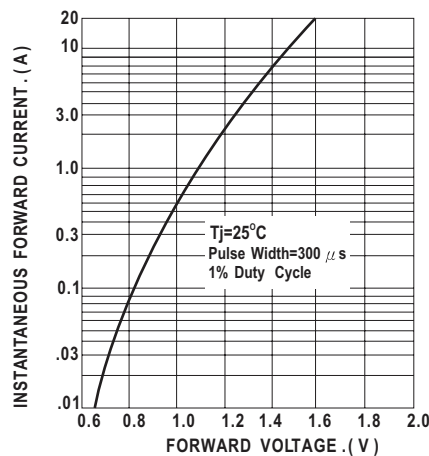


FIG. 6- TYPICAL REVERSE CHARACTERISTICS

