

Fast Recovery Glass Passivated Rectifiers

Reverse Voltage - 50 to 600Volts
Forward Current - 1.0 Amperes

Features

- Fast switching for high efficiency
- Low reverse leakage current
- High current capability
- Low forward voltage drop
- Low cost
- Meet UL flammability classification 94V-0

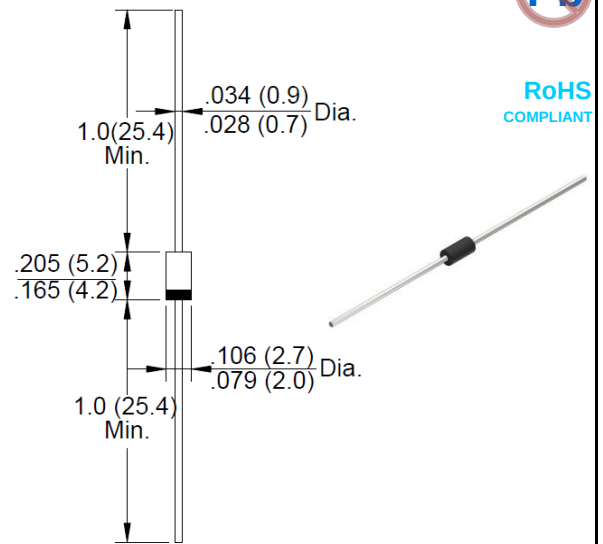
Mechanical Data

- Case: JEDEC DO-41 molded plastic
- Polarity: Color band denotes cathode
- Mounting position: Any

Applications

- For use in SMPS, high frequency inverters, PWM and polarity protection applications

DO-41



Package Outline Dimensions in Inches (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%.

Characteristics	Symbol	1N4933G	1N4934G	1N4935G	1N4936G	1N4937G	Unit
Maximum Repetitive 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, Superimposed on Rated Load (JEDEC Method)	IFSM	30					A
Peak Forward Voltage at 1.0A DC (Note1)	VF	1.3					V
Maximum DC Reverse Current @TJ=25°C	IR	5.0					µA
at Rated DC Blocking Voltage @TJ=100°C		100					
Maximum Reverse Recovery Time (Note 2)	Trr	200					nS
Typical Junction Capacitance (Note3)	CJ	15					pF
Typical Thermal Resistance Junction to Ambient	RθJA	50					°C/W
Operating Junction Temperature Range	TJ	-55 to +150					°C
Storage Temperature Range	TSTG	-55 to +150					°C

Notes: 1. 300uS pulse width, 2%duty cycle.

2. Measured with I_F=0.5A, I_R=1A, I_{RR}=0.25A .

3. Measured at 1.0 MHz and applied reverse voltage of 4.0V DC.

4. The typical data above is for reference only.

Fig. 1 - Forward Current Derating Curve

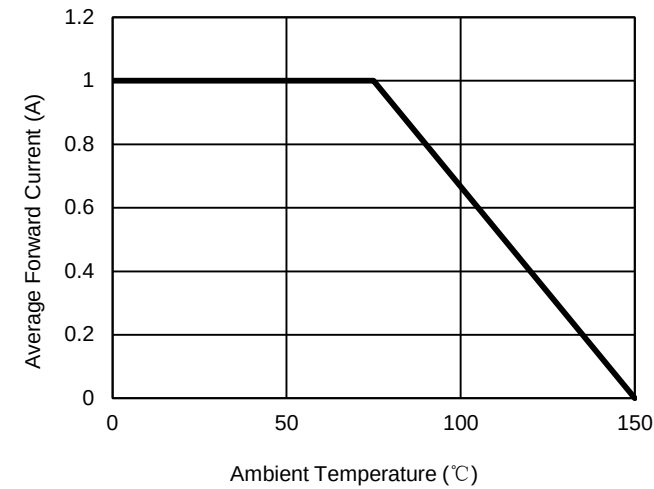


Fig. 2 - Maximum Non-Repetitive Surge Current

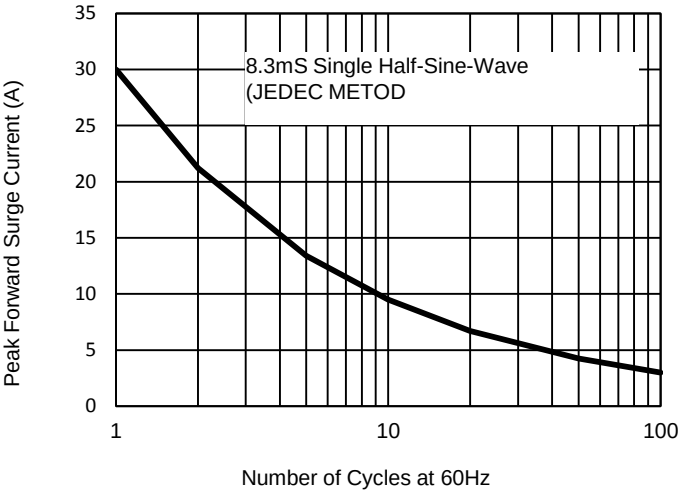


Fig. 3 - Typical Junction Capacitance

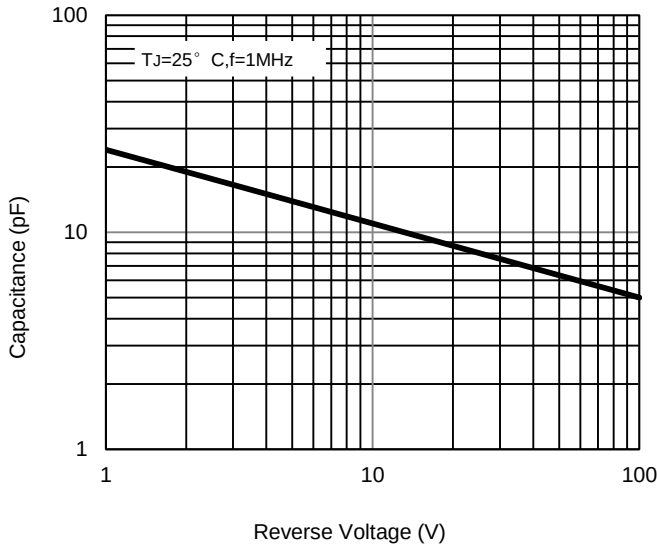
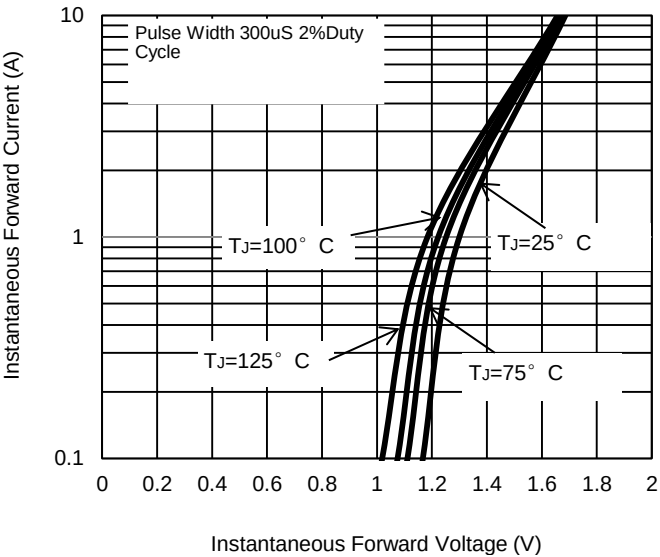


Fig. 4 - Typical Forward Characteristics



The curve above is for reference only.

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