

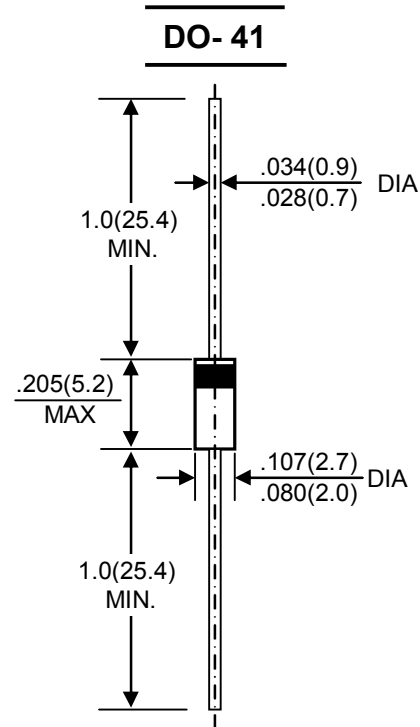
<b>FAST RECOVERY RECTIFIERS</b>	<b>REVERSE VOLTAGE - 50 to 600 Volts</b> <b>FORWARD CURRENT - 1.0 Ampere</b>
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### FEATURES

- Fast switching for high efficiency
- Low cost
- Diffused junction
- Low reverse leakage current
- Low forward voltage drop
- Highcurrent capability
- The plastic material carries UL recognition 94V-0

### MECHANICAL DATA

- Case: JEDEC DO-41 molded plastic
- Polarity: Color band denotes cathode
- Weight: 0.012 ounces , 0.34 grams
- Mounting position: Any



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%

CHARACTERISTICS	SYMBOL	1N4933	1N4934	1N4935	1N4936	1N4937	UNIT
Maximum Recurrent Peak Reverse Voltage	V <sub>RRM</sub>	50	100	200	400	600	V
Maximum RMS Voltage	V <sub>RMS</sub>	35	70	140	280	420	V
Maximum DC Blocking Voltage	V <sub>DC</sub>	50	100	200	400	600	V
Maximum Average Forward Rectified Current @T <sub>A</sub> =75 °C	I <sub>(AV)</sub>	1.0					A
Peak Forward Surge Current 8.3ms Single Half Sine-Wave Super Imposed on Rated Load(JEDEC Method)	I <sub>FSM</sub>	30					A
Peak Forward Voltage at 1.0A DC	V <sub>F</sub>	1.3					V
Maximum DC Reverse Current @T <sub>J</sub> =25°C at Rated DC Blocking Voltage @T <sub>J</sub> =100°C	I <sub>R</sub>	5.0					μA
Maximum Reverse Recovery Time(Note 1)	T <sub>rr</sub>	200					nS
Maximum Reverse Recovery Time(Note 2)	T <sub>rr</sub>	130					nS
Typical Junction Capacitance (Note3)	C <sub>J</sub>	15					pF
Typical Thermal Resistance (Note4)	R <sub>θJA</sub>	50					°C/W
Operating Temperature Range	T <sub>J</sub>	-55 to +125					°C
Storage Temperature Range	T <sub>STG</sub>	-55 to +150					°C

NOTES: 1.Measured with I<sub>F</sub>=1.0A,V<sub>R</sub>=30V,di/dt=50A/us.

2.Measured with I<sub>F</sub>=0.5A,I<sub>R</sub>=1A,I<sub>RR</sub>=0.25A

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

4.Thermal resistance junction to ambient .

# RATING AND CHARACTERISTIC CURVES

1N4933 thru 1N4937



FIG. 1 – FORWARD CURRENT DERATING CURVE

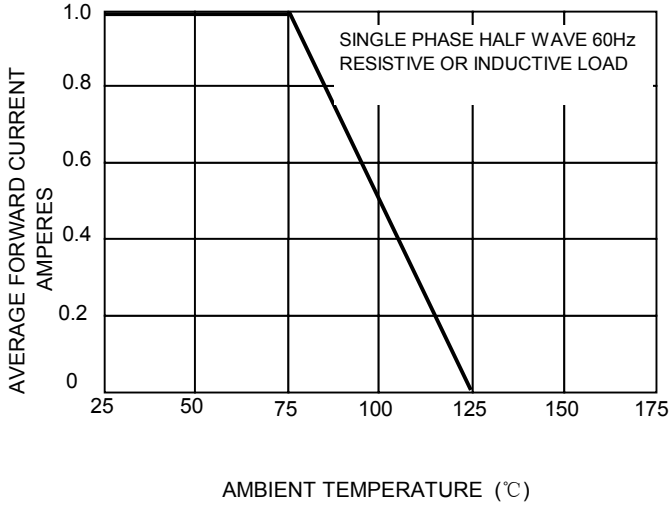


FIG. 2 – MAXIMUM NON-REPETITIVE SURGE CURRENT

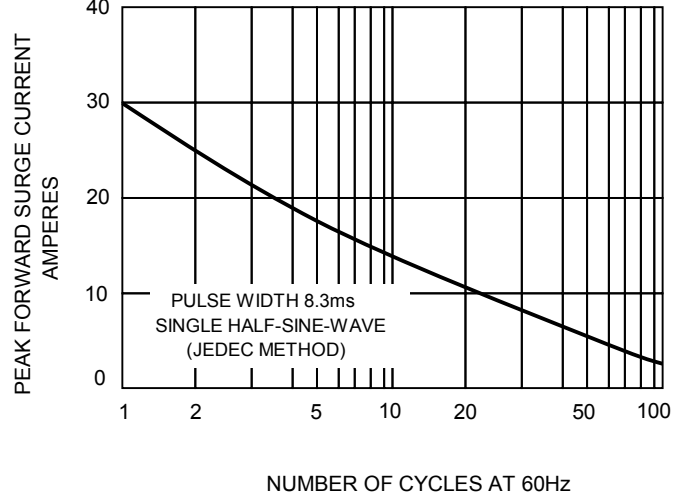


FIG.3 – TYPICAL JUNCTION CAPACITANCE

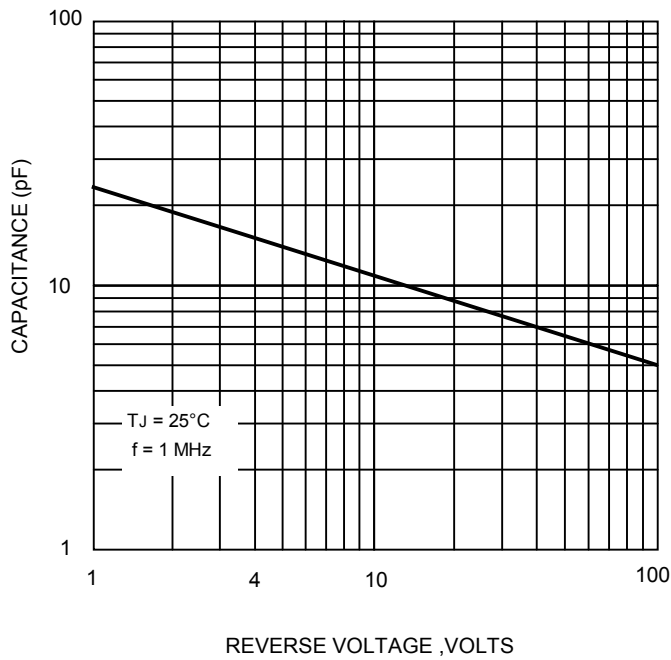


FIG.4-TYPICAL FORWARD CHARACTERISTICS

