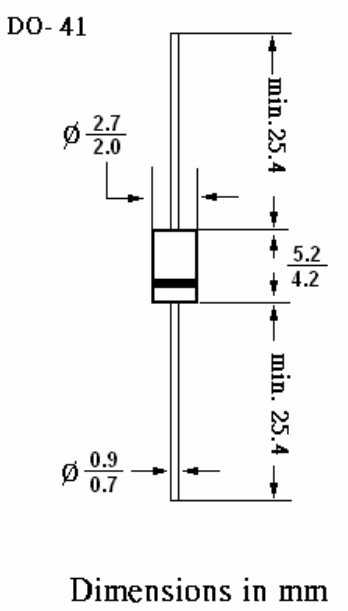
1N5391S THRU 1N5399S

GENERAL PURPOSE PLASTIC SILICON RECTIFIERS
Reverse Voltage – 50 to 1000 Volts
Forward Current – 1.5 Ampere



Features

- Low cost
- High current capability
- Plastic package has Underwriters Laboratory Flammabiliy Classification 94V-O ctilizing Flame Retardant Epoxy Molding Compound
- Low leakage

MECHANICAL DATA:

- Case: Molded plastic, DO-41
- Terminals: Plated axial leads, solderable per MIL-STD-202, method 208 guaranteed
- Polarity: Color band denotes cathode end

Absolute Maximum Ratings and Characteristics

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

	Symbols	1N 5391S	1N 5392S	1N 5393S	1N 5394S	1N 5395S	1N 5396S	1N 5397S	1N 5398S	1N 5399S	Units
Maximum Recurrent Peak Reverse Voltage	V_{RRM}	50	100	200	300	400	500	600	800	1000	V
Maximum RMS Voltage	V_{RMS}	35	70	140	210	280	350	420	560	700	V
Maximum DC Blocking Voltage	V_{DC}	50	100	200	300	400	500	600	800	1000	V
Maximum Average Forward Rectified Current 0.375", 9.5 mm Lead Length at T_A =60℃	$I_{(AV)}$	1.5									A
Peak Forward Surge Current 8.3ms single half sine-wave	I_{FSM}	50									A
Maximum Forward Voltage at 1.5A DC and 25℃	V_F	1.4									V
Maximum Reverse Current, at T_A=25℃ At Rated DC Blocking Voltage T_A=100℃	I_R	5 500									μA
Typical Junction Capacitance (Note 1)	C_J	25									pF
Typical Thermal Resistance (Note 2)	$R_{\Theta JA}$	26									℃/W
Operating and Storage Temperature Range	T_J, T_{stg}	-55 to +150									℃

Notes:

1. Measured at 1 MHz and applied reverse voltage of 4 V_{DC}.

2. Thermal resistance junction to ambient and form junction to lead at 0.375"(9.5mm) lead length P.C.B. mounted.

FIG.1- MAXIMUM FORWARD CURRENT DERATING CURVE

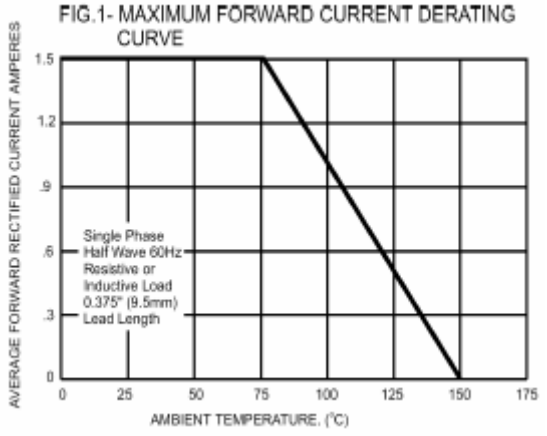


FIG.2- TYPICAL FORWARD CHARACTERISTICS

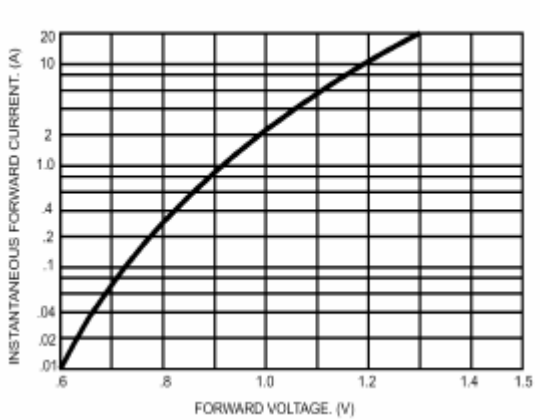


FIG.3- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT

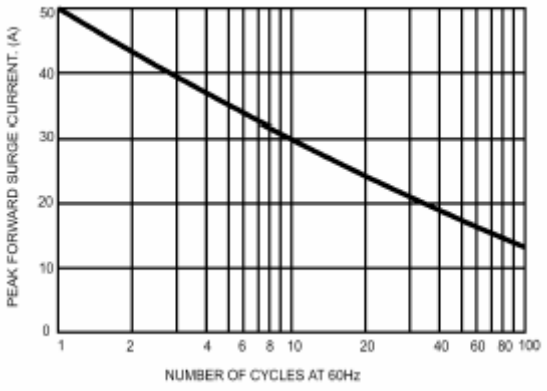


FIG.4- TYPICAL REVERSE CHARACTERISTICS

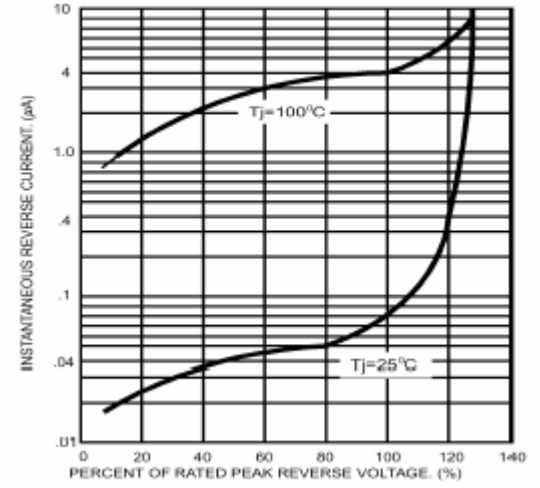
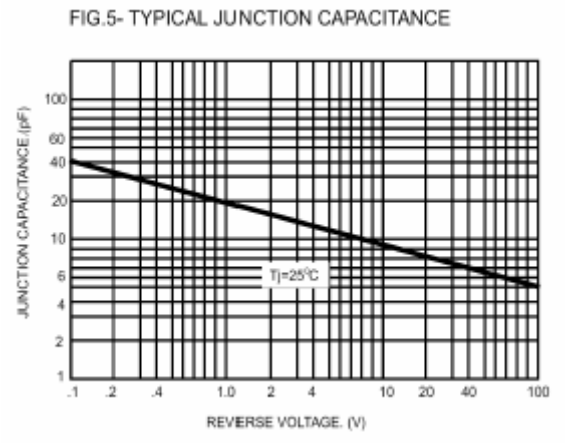



FIG.5- TYPICAL JUNCTION CAPACITANCE