



71 DE 1889105 0000292 1

Plastic Silicon Rectifier

1.5A Series 1N5391-1N5399

Features

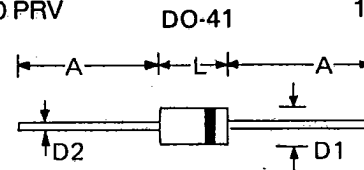
- Low Cost
- High Current Capability
- Low Leakage
- Low Forward Voltage
- High Surge Capability

Mechanical Data

- Case: JEDEC DO-41 Molded Plastic UL 94V-0
- Lead: MIL STD-202F-Method 208D guaranteed
- Weight: 0.34 grams

Voltage Range
50 to 1000 PRV

Current
1.5A



Inch.	A	L	D1	D2
Min.	1.00	0.166	0.10	0.028
Max.		0.205	0.11	0.034

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%.

	1N5391	1N5392	1N5393	1N5394	1N5395	1N5396	1N5397	1N5398	1N5399	UNITS
*Peak Reverse Voltage	50	100	200	300	400	500	600	800	1000	V
*Max. RMS Voltage	35	70	140	210	280	350	420	560	700	V
*Max. DC Blocking Voltage	50	100	200	300	400	500	600	800	1000	V
*Max. Average Forward Rectified Current	1.5									A
*Peak Forward Surge Current, IFM, 1 cycle at Rated Current	50									A
*Max. Forward Voltage @1.0 A DC	1.1									V
*Max. DC Reverse Current at Rated DC Blocking Voltage	5.0									μA
*Typical Junction Capacitance	30									pF
*Storage and Operating Temp.	-65 to +175									°C

*JEDEC Registered Value Note: Special Silicon Rectifiers are also available.

FIG. 1 MAXIMUM CURRENT OUTPUT VS. AMBIENT TEMPERATURE

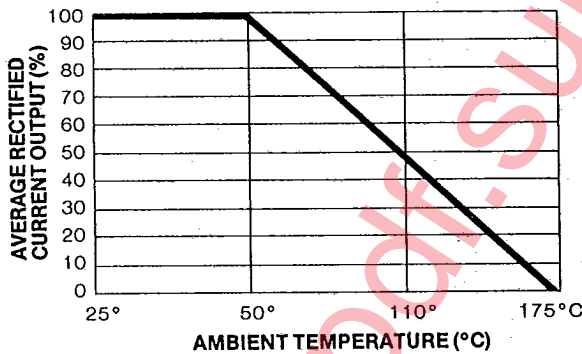


FIG. 2 TYPICAL FORWARD VOLTAGE DROP VS OUTPUT CURRENT (INSTANTANEOUS)

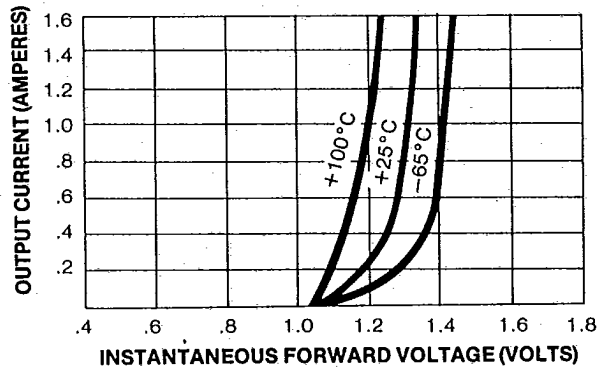


FIG. 3 JUNCTION CAPACITANCE

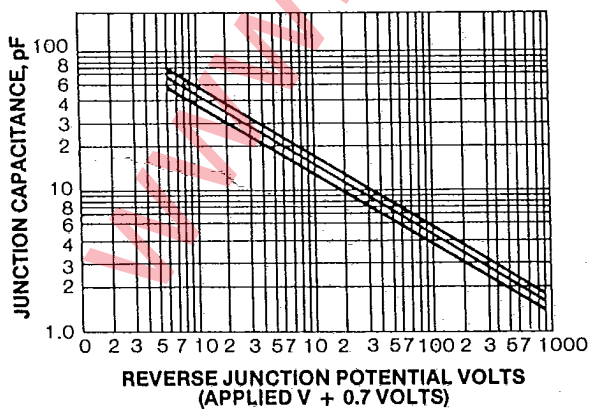
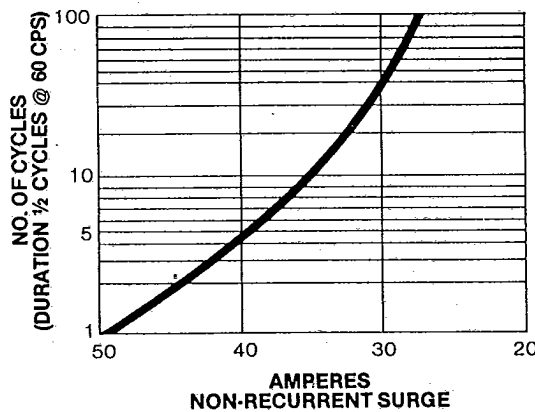


FIG. 4 MAXIMUM SURGE CURRENT





Plastic Silicon Rectifier

3A Series 1N5400-1N5408

Features

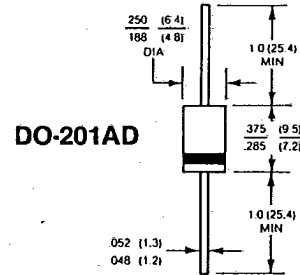
- Low forward voltage
- High current capability
- Low leakage current
- High surge capability
- Low cost

Mechanical Data

- Case: Molded plastic UL 94V-0 recognized Flame Retardant Epoxy
- Terminals: Axial leads, solderable per MIL-STD-202, Method 208
- Polarity: Color band denotes cathode

Voltage Range
50 to 1000 PRV

Current
3A



Dimensions in inches and (millimeters)

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%.

	1N5400	1N5401	1N5402	1N5403	1N5404	1N5405	1N5406	1N5407	1N5408	UNITS	
*Maximum Recurrent Peak Reverse Voltage	50	100	200	300	400	500	600	800	1000	V	
Maximum RMS Voltage	35	70	140	210	280	350	420	560	700	V	
*Maximum DC Blocking Voltage to T _A = 150°C	50	100	200	300	400	500	600	800	1000	V	
*Maximum Average Forward Rectified Current, .5", (12.5mm) Lead Length at T _A = 105°C										3.0	A
*Peak Forward Surge Current 8.3 ms single half sine-wave superimposed on rated load (JEDEC method)										200	A
*Maximum Forward Voltage at 3.0A										1.2	V
*Maximum Reverse Current, at Rated DC Blocking Voltage T _A = 25°C T _A = 150°C.										10 500	μA μA
*Maximum Full Load Reverse Current, Full Cycle Average, .5", (12.5mm) Lead Length T _A = 105°C										500	μA
Typical Junction Capacitance (note 1)										50	pF
*Storage Temperature Range T _A										-65 to +175	°C
*Operating Temperature Range T _J										-65 to +170	°C

NOTES:

- 1—Measured at 1 MHz and applied reverse voltage of 4.0 Volts
- *JEDEC Registered Value.

Ratings and Characteristic Curves IN5400 thru IN5408 Series

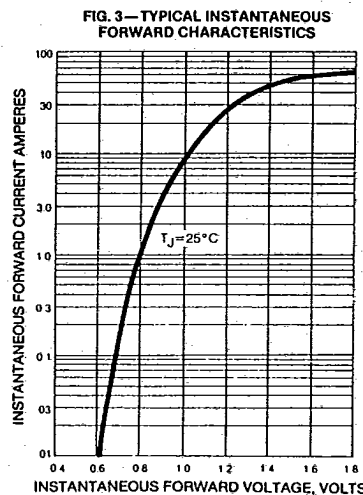
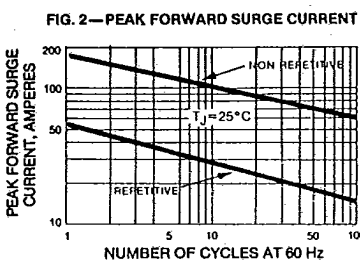
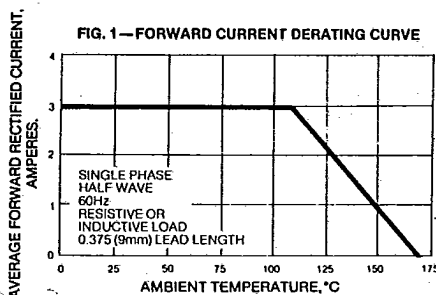


FIG. 4 - TYPICAL JUNCTION CAPACITANCE

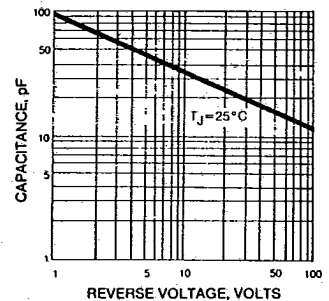
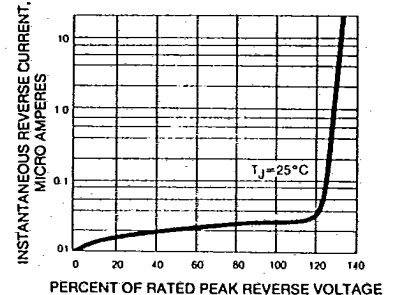


FIG. 5 - TYPICAL REVERSE CHARACTERISTICS



Available Tape and Reel