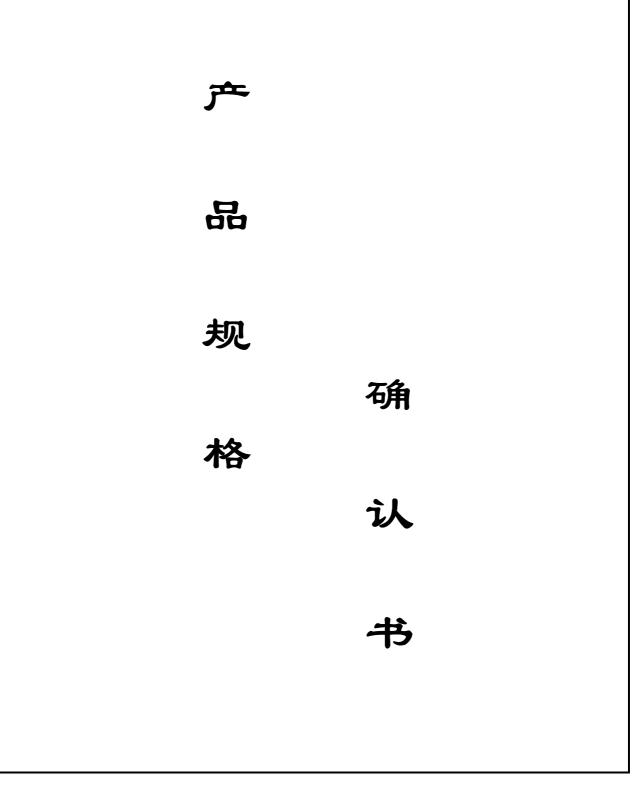
1N540X SERIES

GENERAL PURPOSE PLASTIC SILICON RECTIFIER



1N5400 THRU 1N5408

GENERAL PURPOSE PLASTIC SILICON RECTIFIER

REVERSE VOLTAGE: FORWARD CURRENT:

50 to 1000 VOLTS 3.0 AMPERES

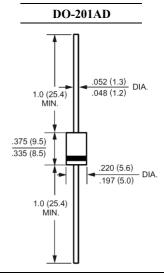
FEATURES

· High current capability

 Plastic package has Underwriters Laboratory Flammability Classification 94V-O ctilizing

Flame Retardant Epoxy Molding Compound.

- \cdot Exceeds environmental standards of MIL-S-19500/228
- · Low leakage.



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Dimensions in inches and (millimeters)

MECHANICAL DATA

Case: Molded plastic, DO-201AD Terminals: Plated axial leads, solderable per MIL-STD-202, method 208 guaranteed Polarity: Color band denotes cathode end Mounting position: Any Weight: 0.04ounce, 1.1gram

Maximum Ratings and Electrical Characteristics

Ratings at 25 ambient temperature unless otherwise specified. Single phase, half wave, $60H_Z$, resistive or inductive load.

For capacitive load, derate current by 20%.

| | Symbols | 1N5400 | 1N5401 | 1N5402 | 1N5403 | 1N5404 | 1N5405 | 1N5406 | 1N5407 | 1N5408 | Units |
|--|----------------------|-------------|--------|--------|--------|--------|--------|--------|--------|--------|------------|
| Maximum Recurrent Peak Reverse Voltage | V _{RRM} | 50 | 100 | 200 | 300 | 400 | 500 | 600 | 800 | 1000 | Volts |
| Maximum RMS Voltage | V _{RMS} | 35 | 70 | 140 | 210 | 280 | 350 | 420 | 560 | 700 | Volts |
| Maximum DC Blocking Voltage | V _{DC} | 50 | 100 | 200 | 300 | 400 | 500 | 600 | 800 | 1000 | Volts |
| Maximum Average Forward Rectified Current | т | 3.0 | | | | | | | | | Amp |
| .375"(9.5mm) Lead Length at T _A =75 | I _(AV) | | | | | | | | | | |
| Peak Forward Surge Current, | | | | | | | | | | | |
| 8.3ms single half-sine-wave | I _{FSM} 200 | | | | | | | | Amp | | |
| superimposed on rated load (JEDEC method) | | | | | | | | | | | |
| Maximum Forward Voltage | V _F | 1.1 | | | | | | | | | Volts |
| at 3.0A DC and 25 | ۷F | | | | | | | | | | |
| Maximum Reverse Current at T _A =25 | т | 5.0 | | | | | | | | | uAmp |
| at Rated DC Blocking Voltage T _A =100 | I _R | 1000 | | | | | | | | | |
| Typical Junction Capacitance (Note 1) | CJ | 50 | | | | | | | | | pF |
| Typical Thermal Resistance (Note 2) | R _{0JA} | 18 | | | | | | | | | / W |
| Operating Junction Temperature Range | TJ | -55 to +150 | | | | | | | | | |
| Storage Temperature Range | Tstg | -55 to +150 | | | | | | | | | |

NOTES:

1- Measured at 1 MH_Z and applied reverse voltage of 4.0 VDC.

2- Thermal Resistance Junction to Ambient and form junction to lead at 0.375"(9.5mm) lead length P.C.B. Mounted with 0.8x0.8" (20x20mm) copper pads.

1N5400 THRU 1N5408 *GENERAL PURPOSE PLASTIC SILICON RECTIFIER*

RATINGS AND CHARACTERISTIC CURVES

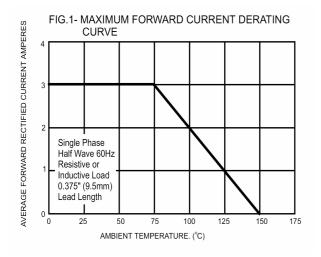


FIG.3- TYPICAL FORWARD CHARACTERISTICS

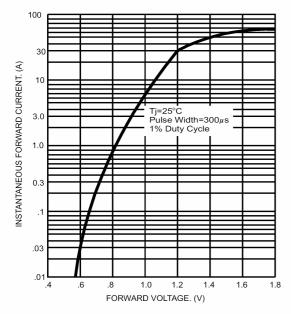


FIG.2- MAXIMUM NON-REPETITIVE FORWARD SURGE CURRENT 200 ₹ PEAK FORWARD SURGE CURRENT. 100 NON-REPETITIVE 50 Tj=25°C 8.3ms Single Half REPETITIVE Sine Wave JEDEC Method 10 5 10 50 100 1 NUMBER OF CYCLES AT 60Hz

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FIG.4- TYPICAL JUNCTION CAPACITANCE

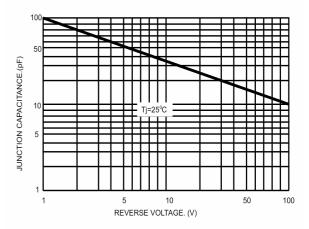


FIG.5- TYPICAL REVERSE CHARACTERISTICS

