



GENERAL PURPOSE ABRUPT VARACTOR DIODES
1N5139 - 1N5148
1N5139A - 1N5148A

| PART NUMBER | CAPACITANCE @ 4 Vdc | | | CAPACITANCE RATIO C•4V / C•60V MIN | MIN QUALITY FACTOR Q @ 4 Vdc f = 50 MHz |
|-------------|---------------------|-----------|------|--|---|
| | MIN | pF NOM | MAX | | |
| 1N5139 | 6.12 | 6.8 | 7.48 | 2.7 | 350 |
| ◆ 1N5139A | 6.46 | 6.8 | 7.14 | 2.7 | 350 |
| 1N5140 | 9.0 | 10.0 | 11.0 | 2.8 | 300 |
| ◆ 1N5140A | 9.5 | 10.0 | 10.5 | 2.8 | 300 |
| 1N5141 | 10.8 | 12.0 | 13.2 | 2.8 | 300 |
| ◆ 1N5141A | 11.4 | 12.0 | 12.6 | 2.8 | 300 |
| 1N5142 | 13.5 | 15.0 | 16.5 | 2.8 | 250 |
| ◆ 1N5142A | 14.3 | 15.0 | 15.7 | 2.8 | 250 |
| 1N5143 | 16.2 | 18.0 | 19.8 | 2.8 | 250 |
| ◆ 1N5143A | 17.1 | 18.0 | 18.9 | 2.8 | 250 |
| 1N5144 | 19.8 | 22.0 | 24.2 | 3.2 | 200 |
| ◆ 1N5144A | 20.9 | 22.0 | 23.1 | 3.2 | 200 |
| 1N5145 | 24.3 | 27.0 | 29.7 | 3.2 | 200 |
| ◆ 1N5145A | 25.7 | 27.0 | 28.3 | 3.2 | 200 |
| 1N5146 | 29.7 | 33.0 | 36.3 | 3.2 | 200 |
| ◆ 1N5146A | 31.4 | 33.0 | 34.6 | 3.2 | 200 |
| 1N5147 | 36.1 | 39.0 | 42.9 | 3.2 | 200 |
| ◆ 1N5147A | 37.1 | 39.0 | 40.9 | 3.2 | 200 |
| 1N5148 | 42.3 | 47.0 | 51.7 | 3.2 | 200 |
| ◆ 1N5148A | 44.7 | 47.0 | 49.3 | 3.2 | 200 |

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|-------------------------------------|-----------------------------|----------------|
| Package Style | | DO-7 |
| DC Power Dissipation (Pd) | | 400 mW |
| Forward Current (If) | | 250 mA |
| Min Reverse Breakdown Voltage (Bvr) | @ Ir = 10 µA dc | 65 Vdc |
| Max Reverse Current (Ir) | @ Vr = 55 Vdc | 20 nA dc |
| Max Reverse Current (Ir2) | @ Vr = 55 Vdc; Ta = 150°C | 20 µA dc |
| Temp Coefficient of Capacitance | @ Vr=4 Vdc; Ta -40 to +85°C | .03%/°C |
| Operating Temperature Range (Topr) | | -65 to + 175°C |
| Storage Temperature Range (Tstg) | | -65 to + 200°C |
| Voltage Tolerance: | Standard Device | ±10% |
| | Suffix A | ± 5% |

◆ DENOTES MILITARY APPROVAL FOR JAN - JANTX - JANTXV