

Current Regulator and Varactor Tuning Diodes

1N5283 -
1N5314
1N950 -
1N956
KV950 -

CURRENT REGULATOR FIELD EFFECT DIODES

| Type Number | Nom Regulator Current Ip(mA) @ Vt = 25V | | | Min Dynamic Impedance Zt @ Vt = 25V (M ohm) | Min Knee Impedance Zk @ Vk = 6V (M ohm) | Max Limiting Voltage VL @ IL = 0.8 Ip (volts) |
|-------------|--|-------|-------|---|---|---|
| | Nom | Min | Max | | | |
| Δ 1N5283 | 0.22 | 0.198 | 0.242 | 25.00 | 2.750 | 1.00 |
| Δ 1N5284 | 0.24 | 0.216 | 0.264 | 19.00 | 2.350 | 1.00 |
| Δ 1N5285 | 0.27 | 0.243 | 0.297 | 14.00 | 1.950 | 1.00 |
| Δ 1N5286 | 0.30 | 0.270 | 0.330 | 9.00 | 1.600 | 1.00 |
| Δ 1N5287 | 0.33 | 0.297 | 0.363 | 6.60 | 1.350 | 1.00 |
| Δ 1N5288 | 0.39 | 0.351 | 0.429 | 4.10 | 1.000 | 1.05 |
| Δ 1N5289 | 0.43 | 0.387 | 0.473 | 3.30 | 0.870 | 1.05 |
| Δ 1N5290 | 0.47 | 0.423 | 0.517 | 2.70 | 0.750 | 1.05 |
| Δ 1N5291 | 0.56 | 0.504 | 0.616 | 1.90 | 0.560 | 1.10 |
| Δ 1N5292 | 0.62 | 0.558 | 0.682 | 1.55 | 0.470 | 1.13 |
| Δ 1N5293 | 0.68 | 0.612 | 0.748 | 1.35 | 0.400 | 1.15 |
| Δ 1N5294 | 0.75 | 0.675 | 0.825 | 1.15 | 0.335 | 1.20 |
| Δ 1N5295 | 0.82 | 0.738 | 0.902 | 1.00 | 0.290 | 1.25 |
| Δ 1N5296 | 0.91 | 0.819 | 1.001 | 0.88 | 0.240 | 1.29 |
| Δ 1N5297 | 1.00 | 0.900 | 1.100 | 0.80 | 0.205 | 1.35 |
| Δ 1N5298 | 1.10 | 0.990 | 1.210 | 0.70 | 0.180 | 1.40 |
| Δ 1N5299 | 1.20 | 1.080 | 1.320 | 0.640 | 0.155 | 1.45 |
| Δ 1N5300 | 1.30 | 1.170 | 1.430 | 0.580 | 0.135 | 1.50 |
| Δ 1N5301 | 1.40 | 1.260 | 1.540 | 0.540 | 0.115 | 1.55 |
| Δ 1N5302 | 1.50 | 1.350 | 1.650 | 0.510 | 0.105 | 1.60 |
| Δ 1N5303 | 1.60 | 1.440 | 1.760 | 0.475 | 0.092 | 1.65 |
| Δ 1N5304 | 1.80 | 1.620 | 1.980 | 0.420 | 0.074 | 1.75 |
| Δ 1N5305 | 2.00 | 1.800 | 2.200 | 0.395 | 0.061 | 1.85 |
| Δ 1N5306 | 2.20 | 1.980 | 2.420 | 0.370 | 0.052 | 1.95 |
| Δ 1N5307 | 2.40 | 2.160 | 2.640 | 0.345 | 0.044 | 2.00 |
| Δ 1N5308 | 2.70 | 2.430 | 2.970 | 0.320 | 0.035 | 2.15 |
| Δ 1N5309 | 3.00 | 2.700 | 3.300 | 0.300 | 0.029 | 2.25 |
| Δ 1N5310 | 3.30 | 2.970 | 3.630 | 0.280 | 0.024 | 2.35 |
| Δ 1N5311 | 3.60 | 3.240 | 3.960 | 0.265 | 0.020 | 2.50 |
| Δ 1N5312 | 3.90 | 3.510 | 4.290 | 0.255 | 0.017 | 2.60 |
| Δ 1N5313 | 4.30 | 3.870 | 4.730 | 0.245 | 0.014 | 2.75 |
| Δ 1N5314 | 4.70 | 4.230 | 5.170 | 0.235 | 0.012 | 2.90 |

JAN
JANTX
JANTXV
versions

GENERAL PURPOSE VARACTOR TUNING DIODES

| Type Number | Capacitance @ -4 Vdc | Capacitance Range 0.1 Vdc to MWV | Quality Factor Q @ -4 Vdc, f = 50 MHz | | Reverse Voltage @ 100 uA | Max Working Voltage |
|-------------|-------------------------|--|--|------|--------------------------------|---------------------------|
| | | | Min | Typ. | | |
| 1N950 | 35 | 6-88 | 7 | 39 | 150 | 130 |
| 1N951 | 50 | 12-120 | 7 | 36 | 100 | 80 |
| 1N952 | 70 | 20-270 | 7 | 30 | 75 | 60 |
| 1N953 | 100 | 46-240 | 7 | 23 | 30 | 25 |
| 1N954 | 35 | 14-88 | 7 | 20 | 30 | 25 |
| 1N955 | 50 | 22-120 | 7 | 20 | 30 | 25 |
| 1N956 | 70 | 33-120 | 7 | 20 | 30 | 25 |
| KV950 | 35 | 6-88 | 100 | 130 | 150 | 130 |
| KV951 | 50 | 12-120 | 100 | 120 | 100 | 80 |
| KV952 | 70 | 20-270 | 100 | 110 | 75 | 60 |

MAXIMUM RATINGS

| | 1N5283 - 1N5314 | 1N950 - KV952 |
|--|------------------|------------------|
| Package Style | DO-7 | DO-7 |
| DC Power Dissipation @ 25 °C (Pd) | | 400 mW |
| DC Power Dissipation @ 75 °C (Pd) | 600 mW | |
| Peak Operating Voltage | 100 V | |
| Operating Temperature (Topr) | - 55 to + 200 °C | - 65 to + 150 °C |
| Storage Temperature (Tstg) | - 55 to + 200 °C | - 65 to + 200 °C |
| Reverse Current @ MWV (Ir) | | 1.0 μAdc |
| Reverse Current @ MWV Ta = 150 °C (Ir) | | 50.0 μAdc |
| Capacitance Tolerance: | Standard | ± 20 % |
| Suffix A | | ± 10 % |
| Suffix B | | ± 5 % |
| Suffix C | | ± 2 % |
| Suffix D | | ± 1 % |

NOTES:

All types ± 5% tolerance.

Δ Denotes military approval.