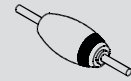


# Spice Model

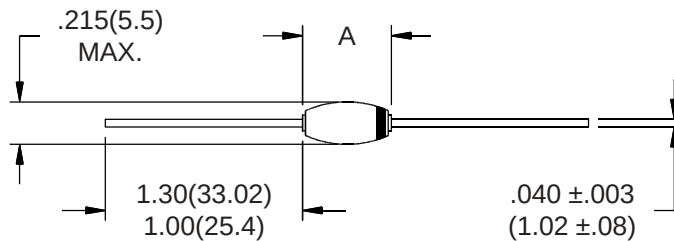


Z20FF3



## Electrical Characteristics and Maximum Ratings

| Part Number | Working Reverse Voltage | Average Rectified Current |          | Reverse Current @ Vrwm |       | Forward Voltage |       | 1 Cycle Surge Current tp=8.3ms (Ifsm) | Repetitive Surge Current (Ifrm) | Reverse Recovery Time (3) (Trr) | Thermal Impedance |        |        | Junction Cap. @50VDC @ 1kHz (Cj) |
|-------------|-------------------------|---------------------------|----------|------------------------|-------|-----------------|-------|---------------------------------------|---------------------------------|---------------------------------|-------------------|--------|--------|----------------------------------|
|             | (Vrwm)                  | (Io)                      |          | (Ir)                   |       | (Vf)            |       |                                       |                                 |                                 | $\theta_{J-L}$    |        |        |                                  |
|             | Volts                   | 55°C(1)                   | 100°C(2) | 25°C                   | 100°C | 25°C            | 25°C  | 25°C                                  | 25°C                            | 25°C                            | L=.000            | L=.125 | L=.250 | 25°C                             |
|             |                         | mAmps                     | mAmps    | µA                     | µA    | Volts           | mAmps | Amps                                  | Amps                            | ns                              | °C/W              | °C/W   | °C/W   | pF                               |
| Z20FF3      | 2000                    | 1000                      | 750      | 1.0                    | 25    | 6.0             | 750   | 65.0                                  | 10.0                            | 30                              | 3                 | 6      | 12     | 20                               |



| Part             | A                |
|------------------|------------------|
| Z20FFX<br>Z50FFX | .350(8.89) MAX.  |
| Z100FFX          | .400(10.16) MAX. |

| Name            | Parameter                      | Value   | Units |
|-----------------|--------------------------------|---------|-------|
| I <sub>s</sub>  | Reverse leakage current        | 5.0E-07 | Amps  |
| N               | Emission coefficient           | 10      |       |
| T               | Temperature                    | 25      | C     |
| RS              | Diode series resistance        | 0.36    | Ohm   |
| TT              | Transit time                   | 30      | nS    |
| C <sub>j0</sub> | Zero-bias junction capacitance | 57.79   | pF    |
| VJ              | Bulk junction potential        | 2.16    | Volts |
| M               | Grading coefficient            | 0.5     |       |
| EG              | Energy-band gap                | 1.11    | Volts |
| XTI             | Temperature coefficient        | 3       |       |
| KF              | Flicker-noise coefficient      | 0       |       |
| AF              | Flicker-noise exponent         | 1       |       |
| FC              | Coefficient for capacitance    | 0.5     |       |
| BV              | Diode breakdown voltage        | 2200    | Volts |
| IBV             | Diode breakdown current        | 100     | uAmps |

Dimensions: In. (mm) \* All temperatures are ambient unless otherwise noted. \* Data subject to change without notice.



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