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- *May 5, 2025
- *DD Vishay Semiconductor Italiana SPA
- *File Name: VS-3C08ED07-M3.txt
- *This document is intended as a SPICE modeling guideline and does not
- *constitute a commercial product datasheet. Designers should refer to the
- *appropriate datasheet of the same number for guaranteed specification
- *limits.
- * Model fit device @25°C-125°C
- * DEVICE=VS-3C08ED07-M3, SiC Diode
- .MODEL VS-3C08ED07-M3 D
- + IS=1.0000E-9
- + N=1.6386
- + RS=51.179E-3
- + IKF=4.9950
- + CJO=424.67E-12
- + M=.44833
- + VJ=1.2651
- + ISR=606.92E-9
- + NR=4.9950
- + BV=849.95
- + IBV=10.000E-6

*Add subsequent parameters for temperature behavior:

- + XTI=4
- + TIKF=0.036
- + TRS1=0.0045

*THERMAL MODEL SUBCIRCUIT

*RC Foster model

.SUBCKT zth-VS-3C08ED07-M3 Tj Tc

| RTHERM1 | Tj | 1 | 5.281e-01 |
|---------|----|----|-----------|
| RTHERM2 | 1 | 2 | 3.165e-02 |
| RTHERM3 | 2 | 3 | 7.122e-01 |
| RTHERM4 | 3 | Тс | 1.077e-01 |
| | | | |
| CTHERM1 | Tj | 1 | 3.156e-02 |
| CTHERM2 | 1 | 2 | 5.191e-05 |
| CTHERM3 | 2 | 3 | 2.020e-03 |
| | | | |

CTHERM4 3 Tc 5.798e-04

.ENDS zth-VS-3C08ED07-M3



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