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\*February 10, 2026

\*DD Vishay Semiconductor Italiana SPA

\*File Name: VS-4C15ET12T-S2L.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-4C15ET12T-S2L, SiC Diode

.MODEL VS-4C15ET12T-S2L D

+ IS=1.986050E-10

+ N=1.512738E+00

+ RS=2.522159E-02

+ IKF=2.000000E+01

+ EG=3.260000E+00

+ CJO=1.178186E-09

+ M=4.824317E-01

+ VJ=1.200000E+00

+ FC=5.000000E-01

+ ISR=1.000000E-10

+ NR=4.995000E+00

+ BV=1.508320E+03

+ IBV=5.000000E-03

+ TT=1.000000E-08

+ XTI=-6.750403E+01

+ TIKF=-6.293052E-08

+ TRS1=1.761037E-04

+ TRS2=9.920727E-05

\*THERMAL MODEL SUBCIRCUIT

\*RC Foster model

.SUBCKT zth- VS-4C15ET12T-S2L Tj Tc

|          |    |   |             |
|----------|----|---|-------------|
| R THERM1 | Tj | 1 | 2.02779E-01 |
|----------|----|---|-------------|

|          |   |   |             |
|----------|---|---|-------------|
| R THERM2 | 1 | 2 | 2.72448E-01 |
|----------|---|---|-------------|

|          |   |    |             |
|----------|---|----|-------------|
| R THERM3 | 2 | Tc | 4.32372E-01 |
|----------|---|----|-------------|

|          |    |   |             |
|----------|----|---|-------------|
| C THERM1 | Tj | 1 | 2.02109E-03 |
|----------|----|---|-------------|

|          |   |   |             |
|----------|---|---|-------------|
| C THERM2 | 1 | 2 | 1.85713E-02 |
|----------|---|---|-------------|

|          |   |    |             |
|----------|---|----|-------------|
| C THERM3 | 2 | Tc | 1.25937E-01 |
|----------|---|----|-------------|

.ENDS zth- VS-4C15ET12T-S2L



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