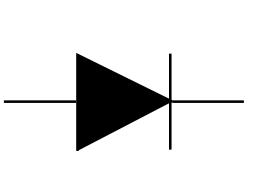

Symmetry

Interface Technologies, div of Waterloo Engr Grp LLC

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Phone: (708) 366-4411 FAX: (708)366-4413

tsms5g

Revision Date: February 20, 2020



DIODE

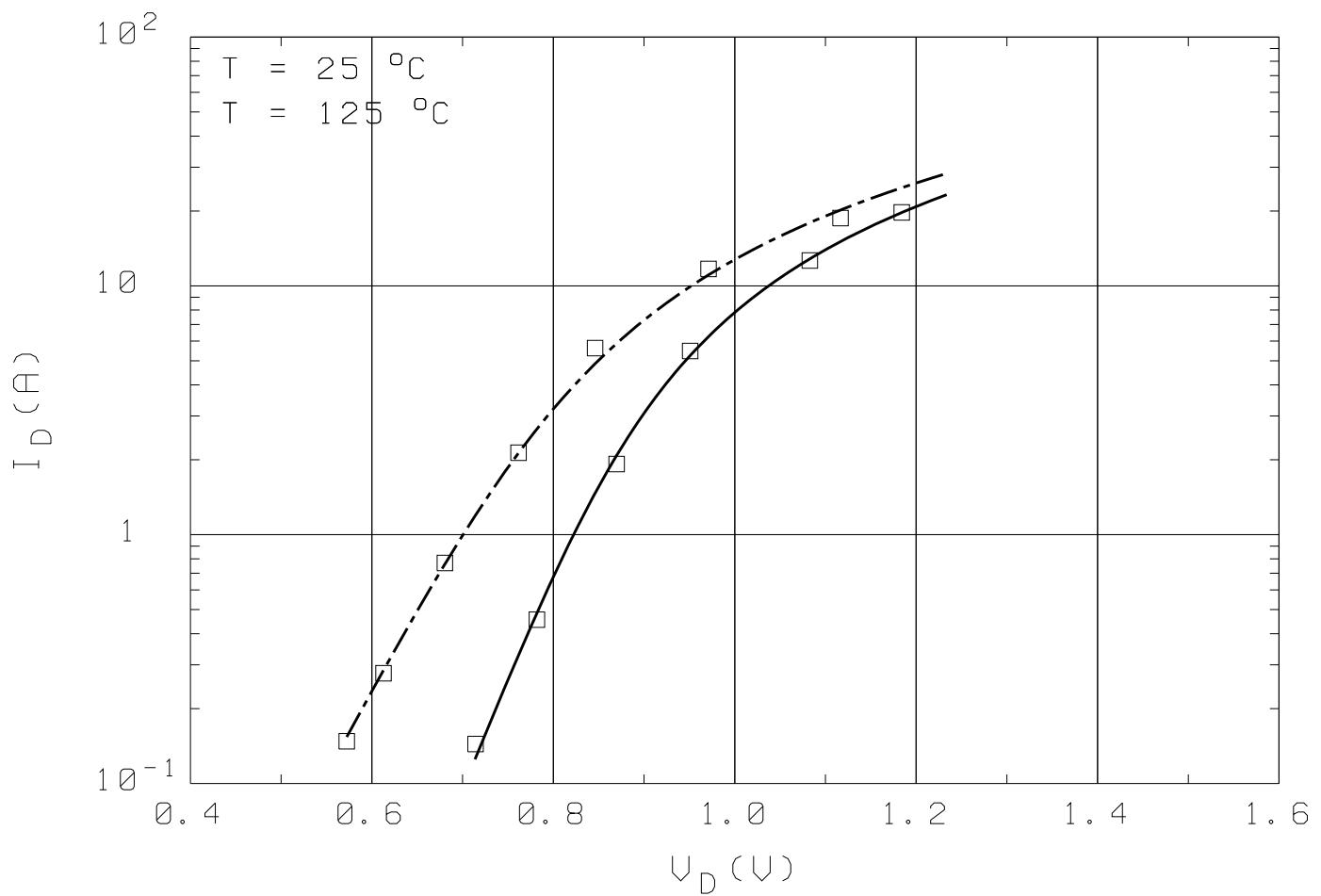
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Electrical Characteristics (Ta = 25°C unless otherwise noted)

Testing Simulator: *MODPEX*

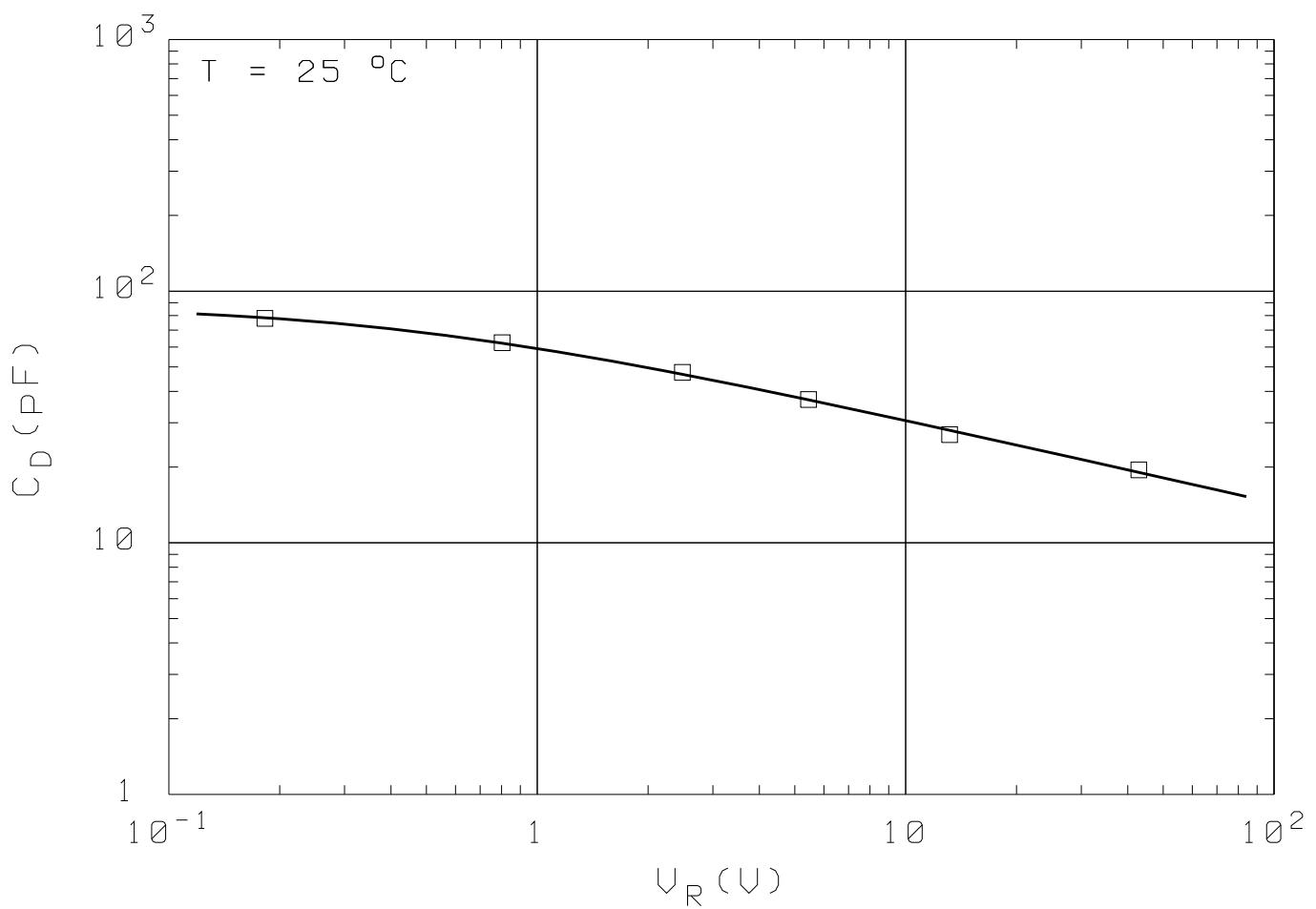
Spec.	Test Conditions	Min	Typ	Max	Model	Unit
VD	ID = 5A			1.1	0.9457	V
CD	VR = 4V		40		40.67	pF

tsms5g: DC Extraction



Current - Voltage Variations

tsms5g: AC Extraction



Capacitance

tsms5g: DIODE Parameters

Symbol	Parameter Name	Value	Unit
IS	Saturation current	4.27×10^{-8}	A
RS	Ohmic resistance	0.01179	Ω
N	Emission coefficient	1.841	
EG	Activation energy	1.085	eV
XTI	Saturation current temperature exponent	2.999	
BV	Reverse breakdown voltage	500	V
IBV	Current at reverse breakdown voltage	1×10^{-5}	A
CJO	Junction depletion capacitance	8.86×10^{-11}	F
VJ	Junction built-in potential	0.4244	V
M	Grading coefficient	0.3319	
FC	Forward-bias junction fit parameter	0.5	
TT	Transit time	1×10^{-9}	Sec
KF	Flicker-noise coefficient	0	
AF	Flicker-noise exponent	1	