

Device Modeling Report

COMPONENTS:
DIODE/ SCHOOTTKY RECTIFIER / STANDARD
PART NUMBER: D3FS6
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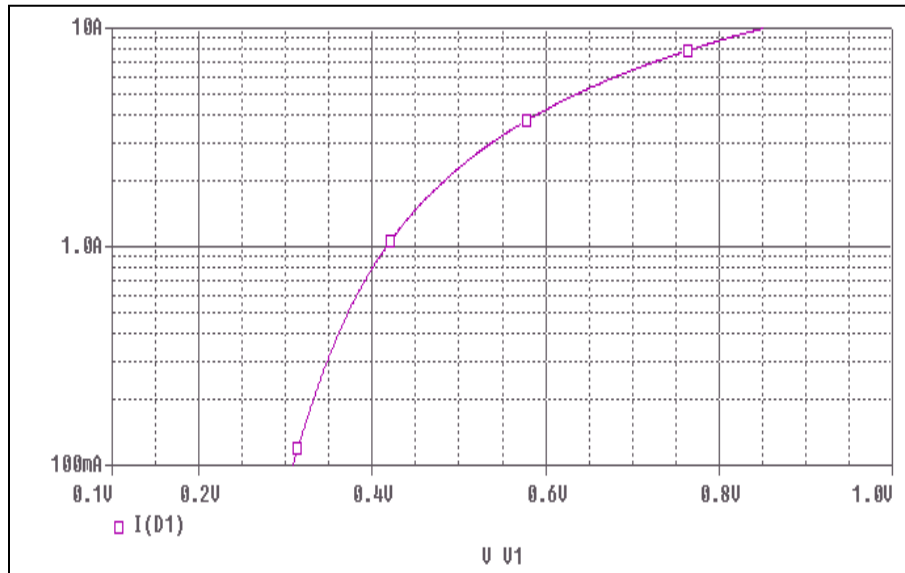


Bee Technologies Inc.

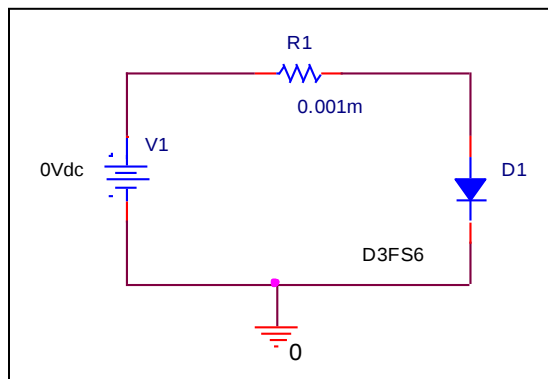
PSpice model parameter	Model description
IS	Saturation Current
N	Emission Coefficient
RS	Series Resistance
IKF	High-injection Knee Current
CJO	Zero-bias Junction Capacitance
M	Junction Grading Coefficient
VJ	Junction Potential
ISR	Recombination Current Saturation Value
BV	Reverse Breakdown Voltage(a positive value)
IBV	Reverse Breakdown Current(a positive value)
TT	Transit Time
EG	Energy-band Gap

Forward Current Characteristic

Circuit Simulation Result

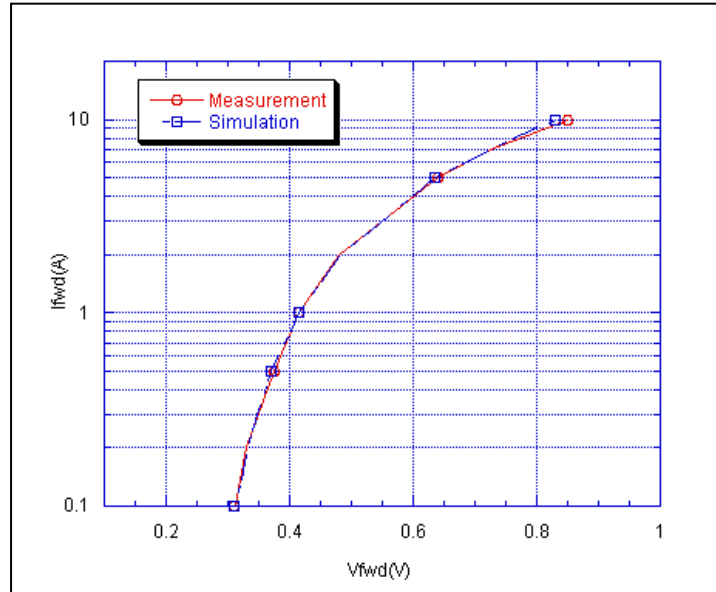


Evaluation Circuit



Comparison Graph

Circuit Simulation Result

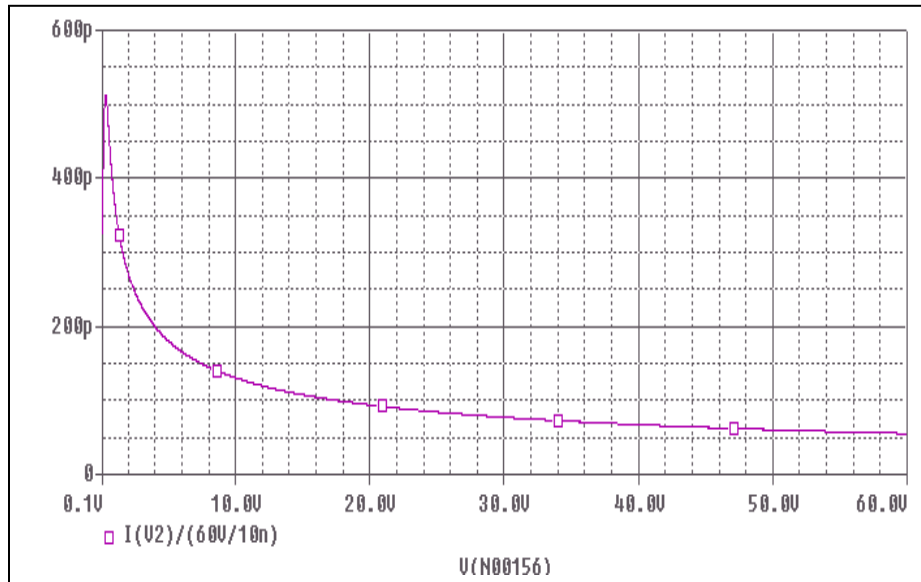


Simulation Result

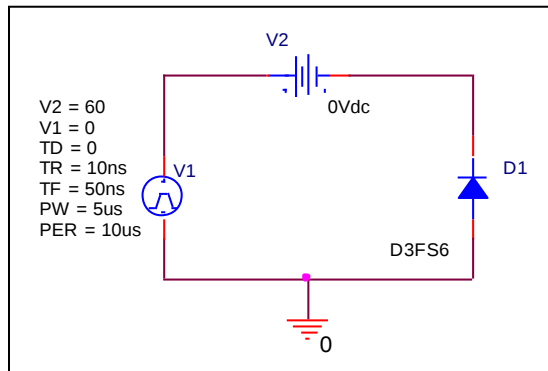
Ifwd(A)	Vfwd(V) Measurement	Vfwd(V) Simulation	%Error
0.1	0.31	0.31	-0.32
0.2	0.33	0.33	0.91
0.5	0.38	0.37	-1.07
1	0.42	0.42	0.24
2	0.48	0.48	0.63
5	0.64	0.64	-0.63
10	0.850	0.830	-2.35

Junction Capacitance Characteristic

Circuit Simulation Result

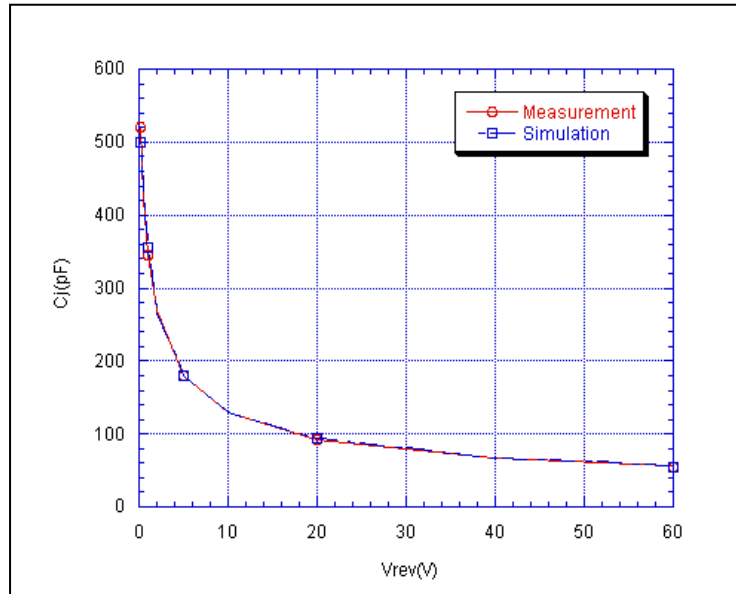


Evaluation Circuit



Comparison Graph

Circuit Simulation Result



Simulation Result

V_{rev} (V)	C_j (pF) Measurement	C_j (pF) Simulation	%Error
0.2	520.00	500.20	-3.81
0.5	425.00	442.30	4.07
1	345.00	355.90	3.16
2	270.00	268.70	-0.48
5	180.00	179.30	-0.39
10	130.00	130.30	0.23
20	92.000	93.700	1.85
60	54.000	55.400	2.59