

Device Modeling Report

COMPONENTS:

DIODE/ SCHOOTKY RECTIFIER / STANDARD

PART NUMBER: D3S6M

MANUFACTURER: SHINDENGEN

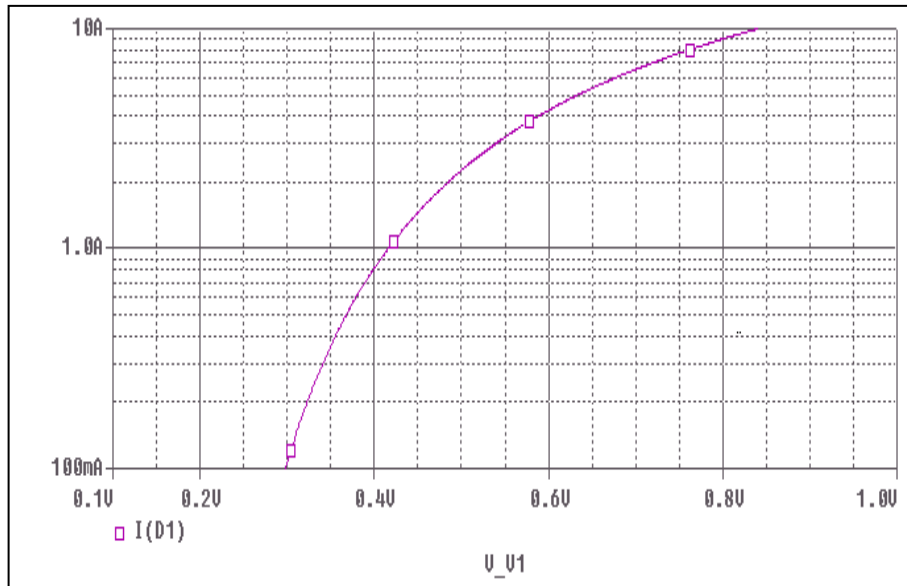


Bee Technologies Inc.

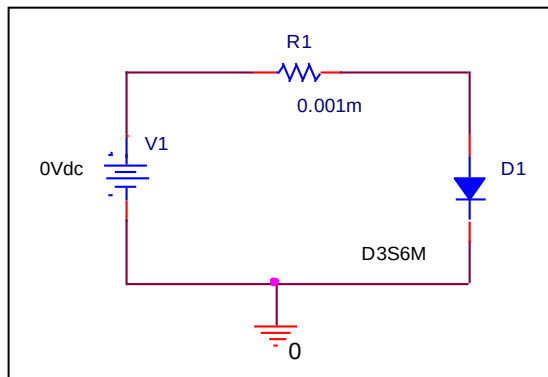
PSpice model parameter	Model description
IS	Saturation Current
N	Emission Coefficient
RS	Series Resistance
IKF	High-injection Knee Current
CJO	Zero-bias Junction Capacitance
M	Junction Grading Coefficient
VJ	Junction Potential
ISR	Recombination Current Saturation Value
BV	Reverse Breakdown Voltage(a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

Forward Current Characteristic

Circuit Simulation Result

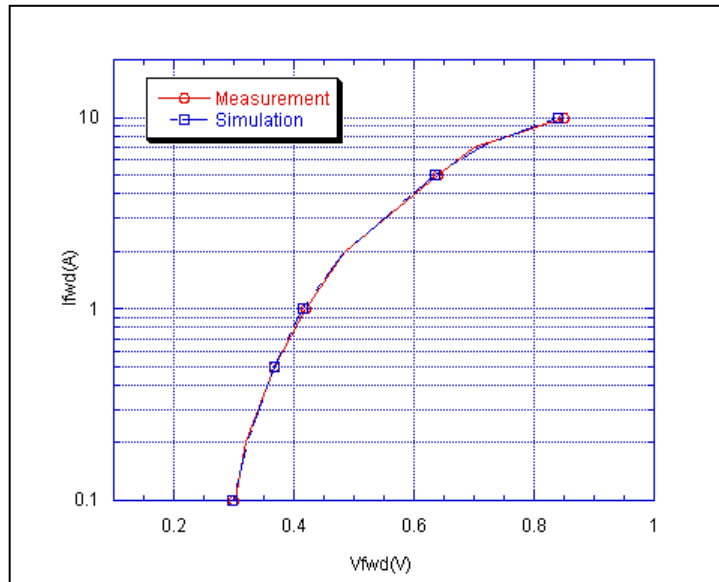


Evaluation Circuit



Comparison Graph

Circuit Simulation Result

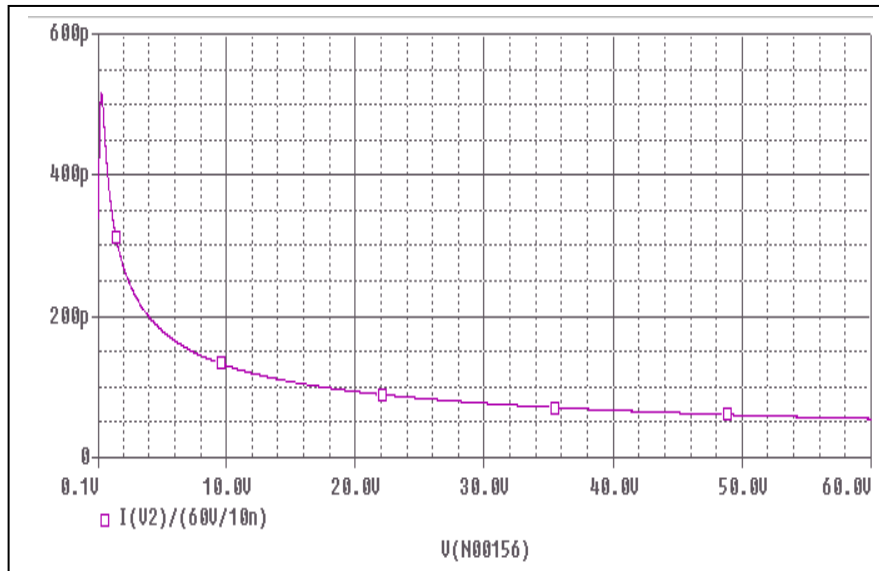


Simulation Result

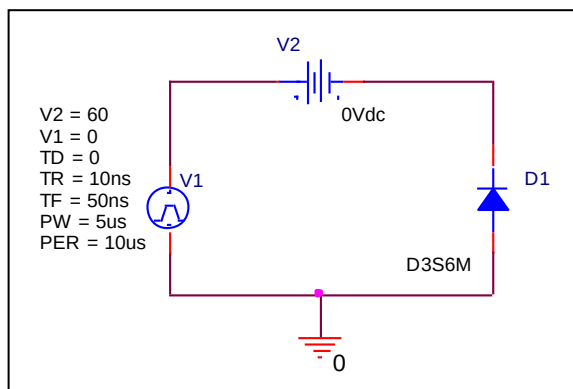
Ifwd(A)	Vfwd(V) Measurement	Vfwd(V) Simulation	%Error
0.1	0.300	0.297	-1.00
0.2	0.320	0.323	0.94
0.5	0.369	0.367	-0.54
1	0.420	0.415	-1.19
2	0.484	0.485	0.21
5	0.640	0.634	-0.94
10	0.850	0.840	-1.18

Junction Capacitance Characteristic

Circuit Simulation Result

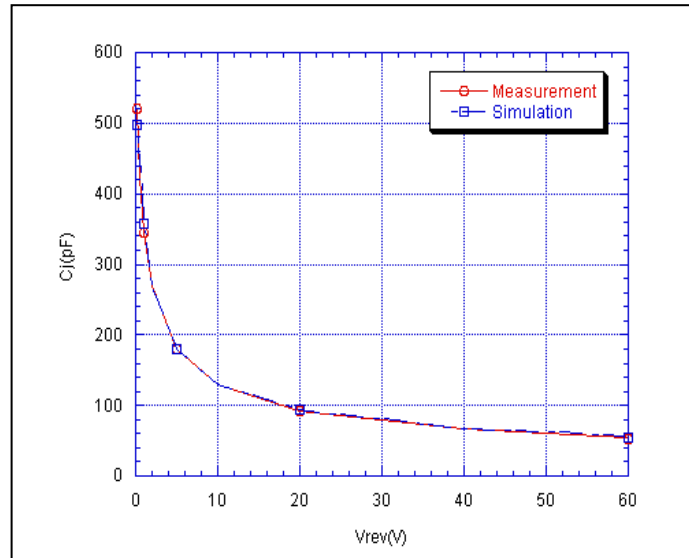


Evaluation Circuit



Comparison Graph

Circuit Simulation Result



Simulation Result

$V_{rev}(V)$	$C_j(pF)$ Measurement	$C_j(pF)$ Simulation	%Error
0.2	520.000	497.300	-4.37
0.5	435.000	450.000	3.45
1	345.000	357.600	3.65
2	270.000	268.900	-0.41
5	179.000	180.000	0.56
10	130.000	129.800	-0.15
20	92.000	93.600	1.74
60	53.000	54.200	2.26