

Device Modeling Report

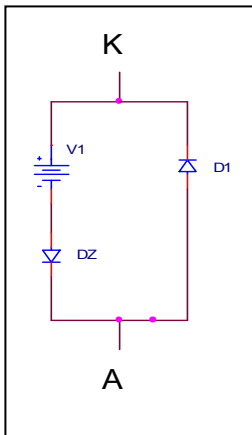
COMPONENTS: DIODE/ZENER DIODE / STANDARD
PART NUMBER: 02CZ2.7_X
MANUFACTURER: TOSHIBA



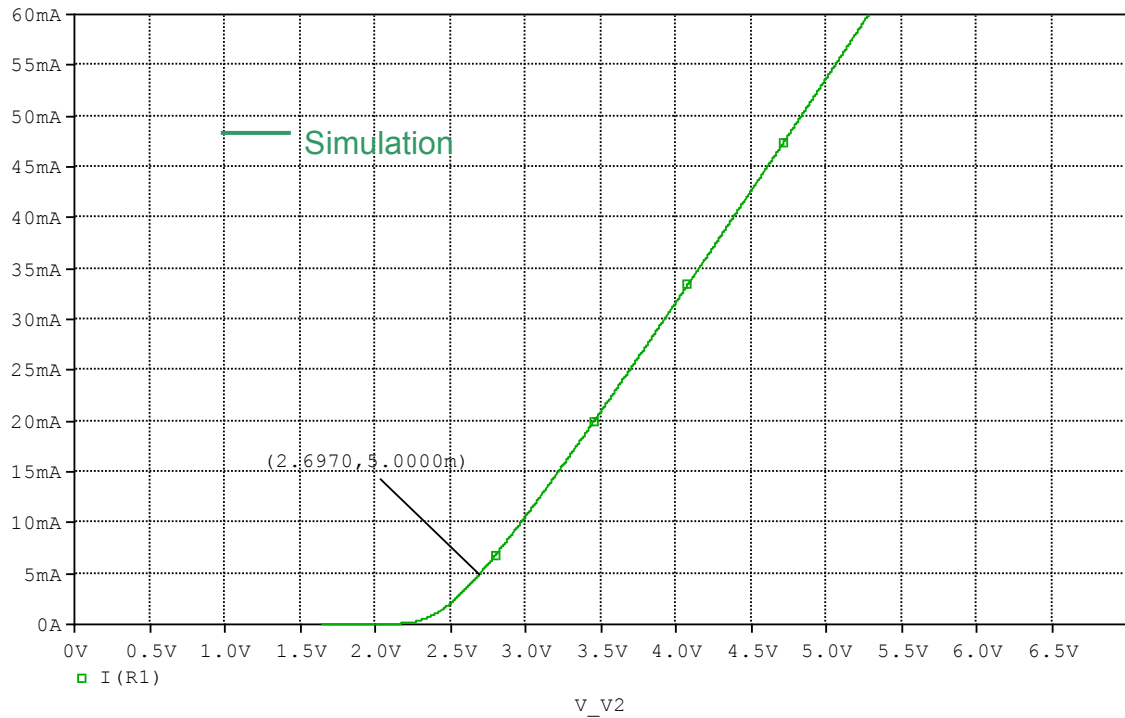
Bee Technologies Inc.

Pspice model parameter	Model description
IS	Saturation Current
N	Emission Coefficient
RS	Series Resistance
CJO	Zero-bias Junction Capacitance
M	Junction Grading Coefficient
VJ	Junction Potential
ISR	Recombination Current Saturation Value
TT	Transit Time

Equivalent circuit



Iz(Zener Current) vs. Vz(Zener Voltage) Characteristics



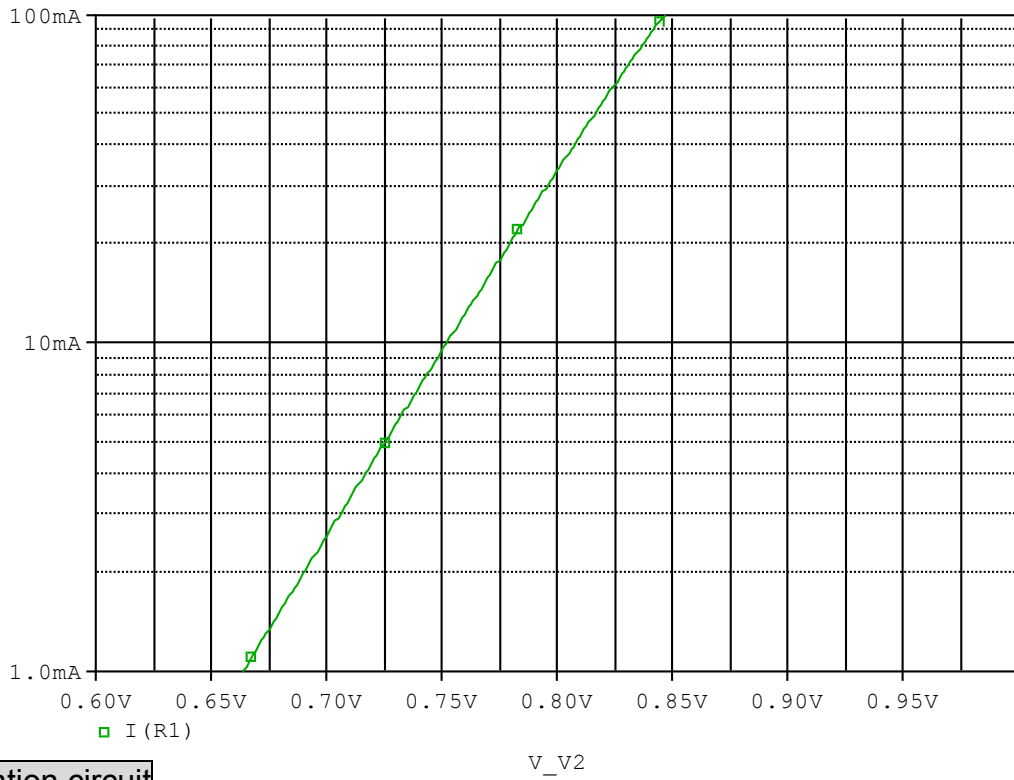
Simulation Result

Vz= **Vz=2.6970(V)** at Iz=5.000m(A)

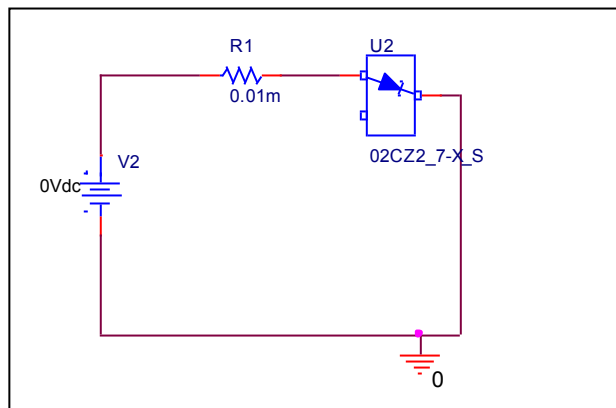
SPEC: Vz=2.50(V) to 2.75(V) at Iz=5.000m(A)

Forward Characteristic

Circuit Simulation result

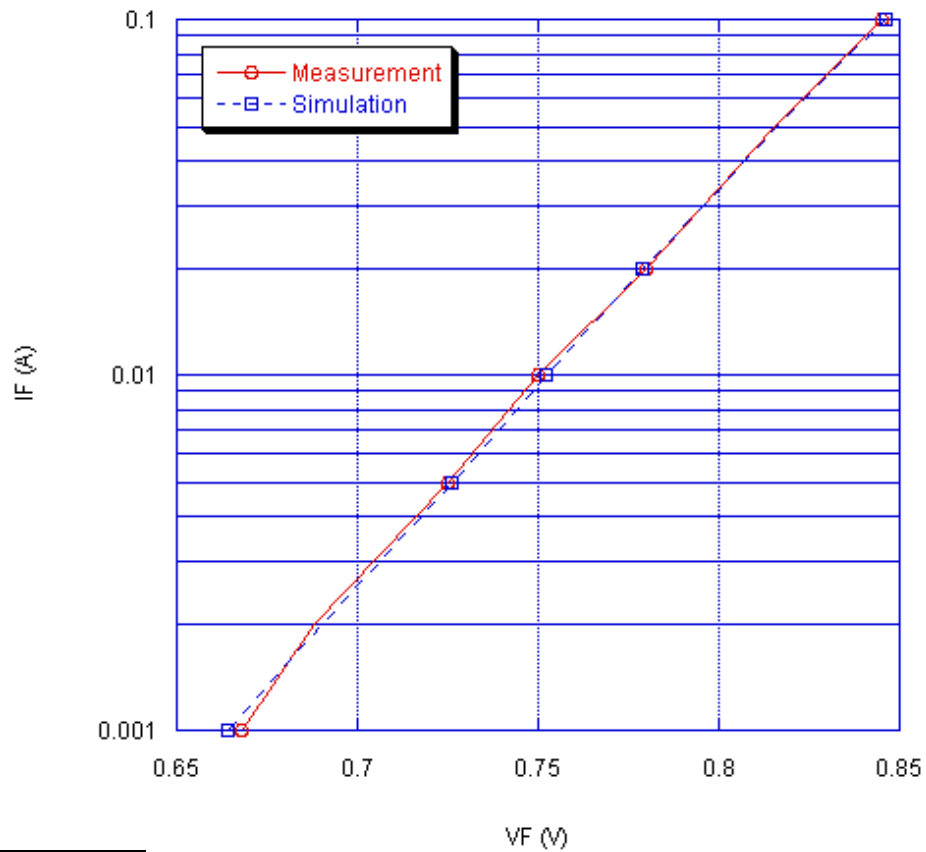


Evaluation circuit



Comparison Graph

Circuit Simulation Result



Simulation Result

I _F (A)	V _F (V)		Error (%)
	Measurement	Simulation	
1m	0.668	0.664	-0.567
2m	0.688	0.690	0.392
5m	0.725	0.726	0.081
10m	0.750	0.752	0.323
20m	0.780	0.779	-0.124
50m	0.815	0.816	0.163
100m	0.845	0.846	0.171