

Device Modeling Report

COMPONENTS: Current Regulative Diode

REMARK: $P_{OV}=100V$, $I_P=0.5mA$

PART NUMBER: E-501

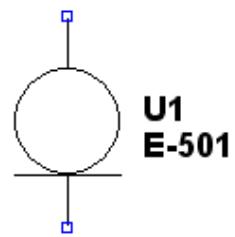
MANUFACTURER: SEMITEC CORPORATION

Remark: LTspice Model



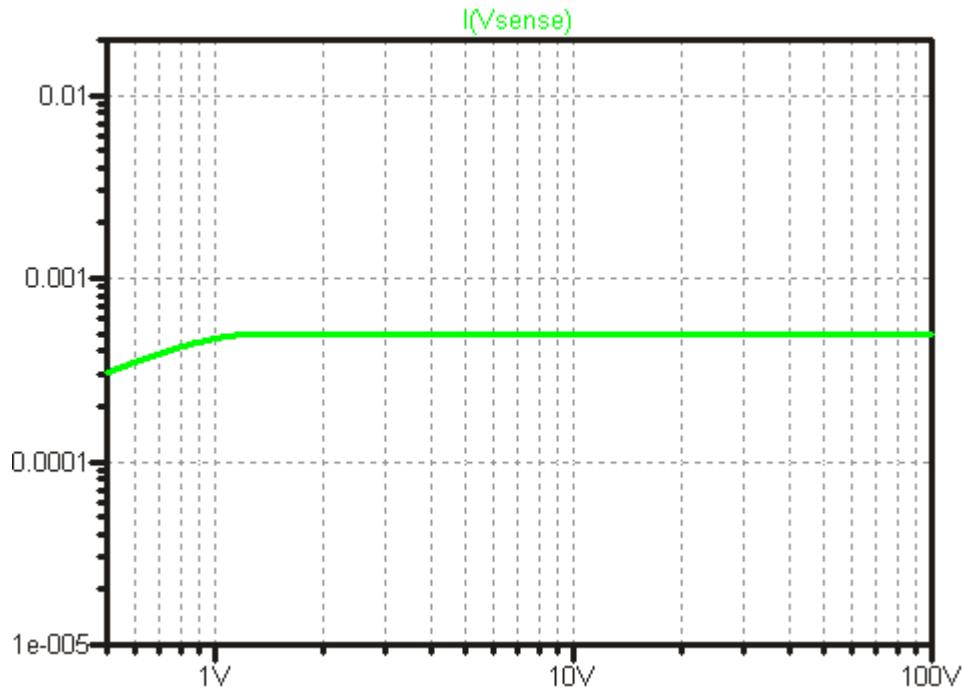
Bee Technologies

Pin Configuration

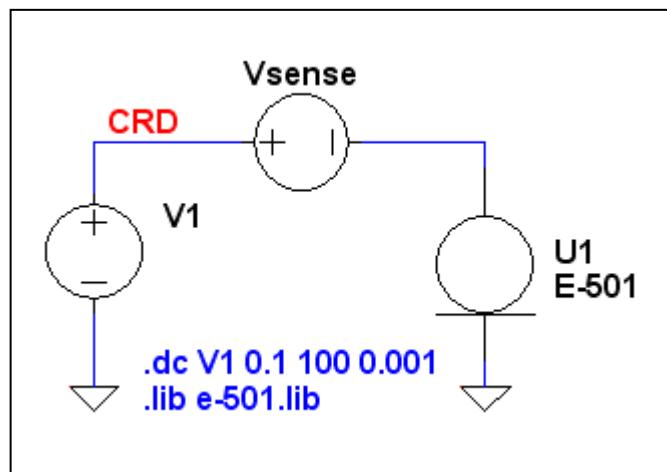


Regulator Current vs. Voltage Characteristics

Simulation result

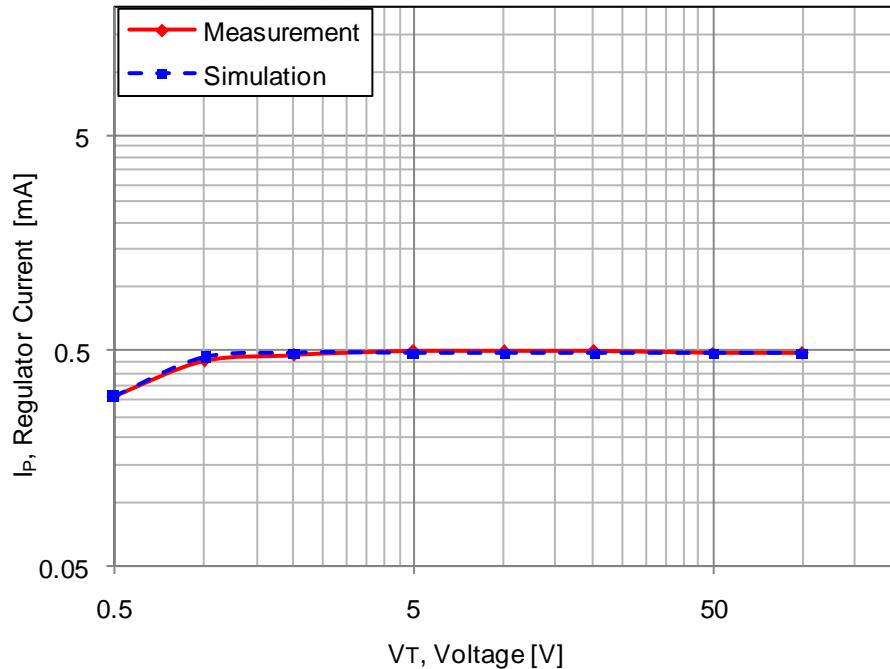


Evaluation circuit



Comparison Graph

Simulation result



Comparison table

T_a=25[°C]

V_T (V)	I_P (mA)		%Error
	Measurement	Simulation	
0.5	0.310	0.306	-1.29
1	0.450	0.469	4.22
2	0.480	0.495	3.13
5	0.500	0.495	-1.00
10	0.500	0.495	-1.00
20	0.500	0.495	-1.00
50	0.495	0.495	0.00
100	0.492	0.495	0.61