

**ABSOLUTE MAXIMUM RATINGS**

Peak Operating Voltage 45 V

Reverse Current 50 mA

Storage Temperature -55 to 150°C

Power Dissipation^a 350 mW

Notes:

a. Derate 2.8 mW/°C above 25°C

SPECIFICATIONS (T_A = 25°C) UNLESS OTHERWISE NOTED

Parameter	Symbol	Test Conditions	Limits			Unit
			Min	Typ ^a	Max	
Peak Operating Voltage ^b	P _{OV}	I _F = 1.1 I _{F(max)}	45	55		V
Reverse Voltage	V _R	I _R = 1 mA		0.8		
Capacitance	C _F	V _F = 25 V, f = 1 MHz		1.5		pF

	Regulator Current ^c (I _F)			Dynamic Impedance ^d (Z _d)		Knee Impedance (Z _k)	Limiting Voltage ^e (V _L)		Temperature Coefficient (θ ₁)
	V _F = 25 V			V _F = 25 V		V _F = 6 V	I _F = 0.8 I _{F(min)}		V _F = 25 V 0°C ≤ T _A ≤ 100°C
Part Number	mA			MΩ		MΩ	V		%/°C
	Min	Nom	Max	Min	Typ ^a	Typ ^a	Max	Typ ^a	Typ ^a
SST502	0.344	0.43	0.516	1.0	2.7	0.7	1.5	0.6	-0.08
SST503	0.448	0.56	0.672	0.7	2.0	0.5	1.7	0.7	-0.12
SST504	0.600	0.75	0.900	0.5	1.5	0.4	1.9	0.8	-0.16
SST505	0.800	1.00	1.200	0.4	1.0	0.3	2.1	0.9	-0.20
SST506	1.120	1.40	1.680	0.3	0.8	0.2	2.5	1.1	-0.24
SST507	1.440	1.80	2.160	0.2	0.6	0.12	2.8	1.3	-0.28
SST508	1.900	2.40	2.900	0.1	0.4	0.08	3.1	1.5	-0.31
SST509	2.400	3.00	3.600	0.09	0.3	0.06	3.5	1.7	-0.34
SST510	2.900	3.60	4.300	0.08	0.3	0.04	3.9	1.9	-0.37
SST511	3.800	4.70	5.600	0.07	0.2	0.03	4.2	2.1	-0.40

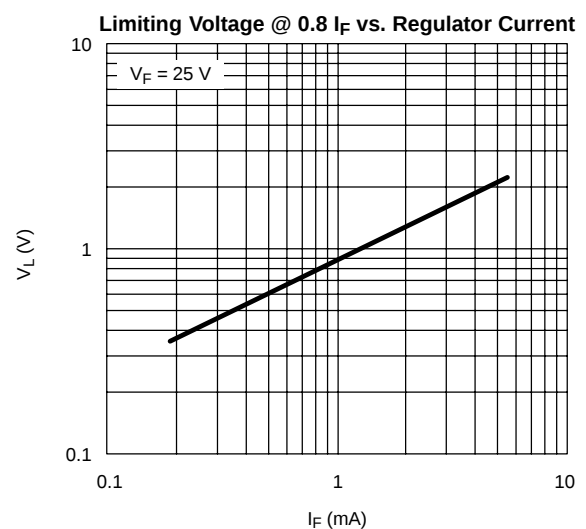
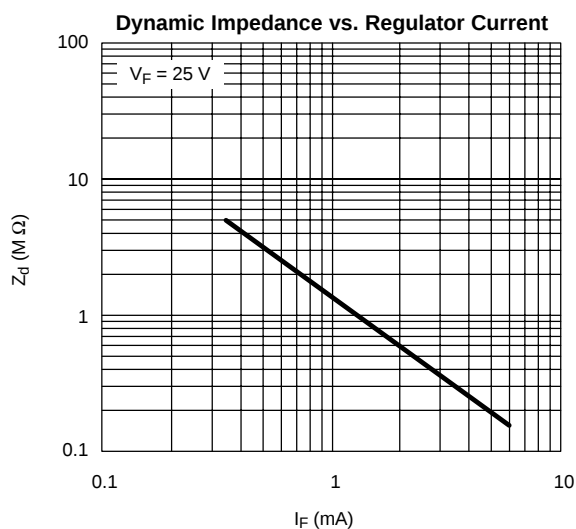
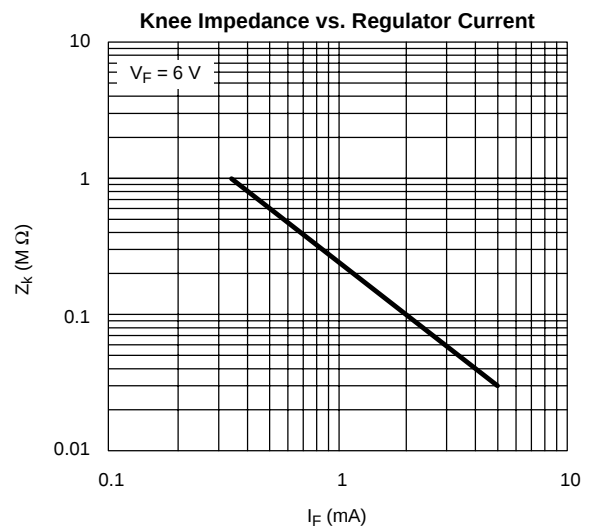
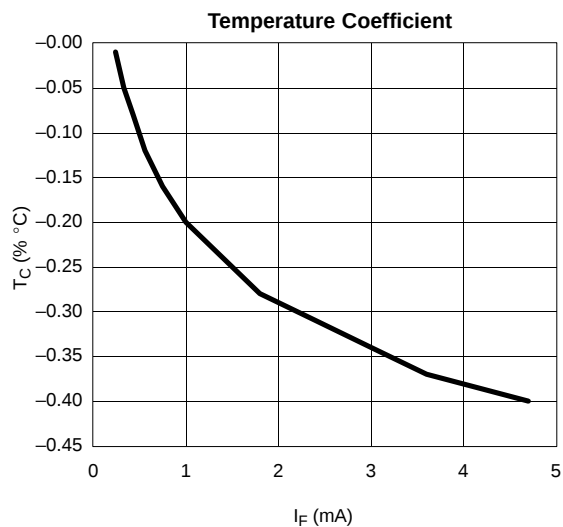
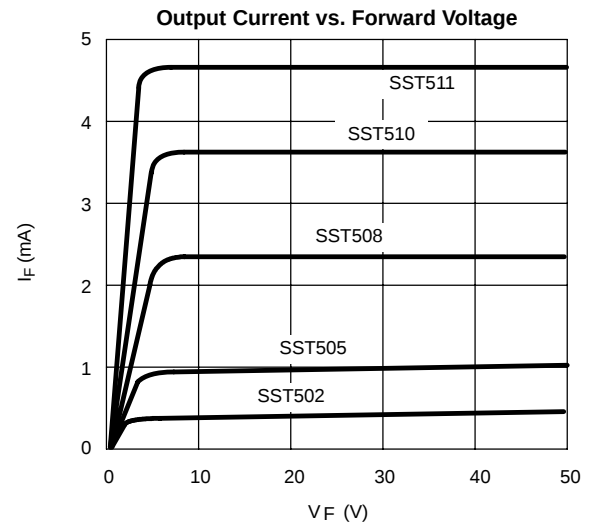
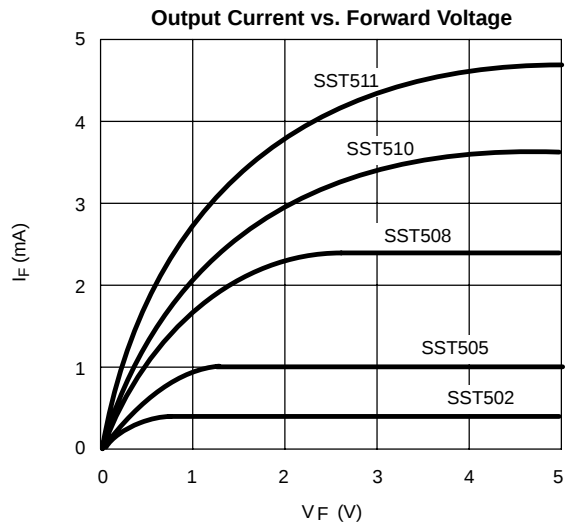
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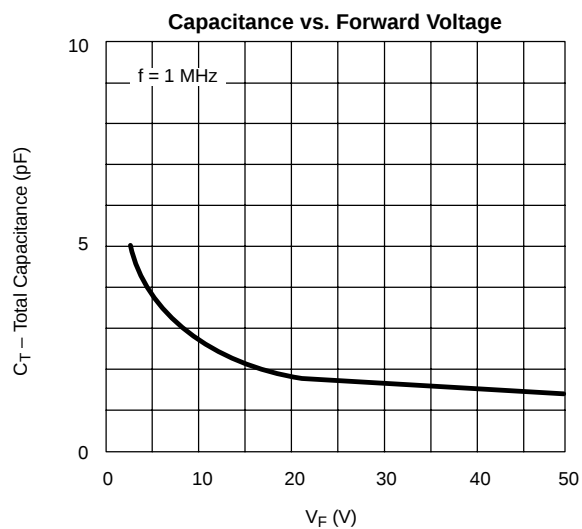
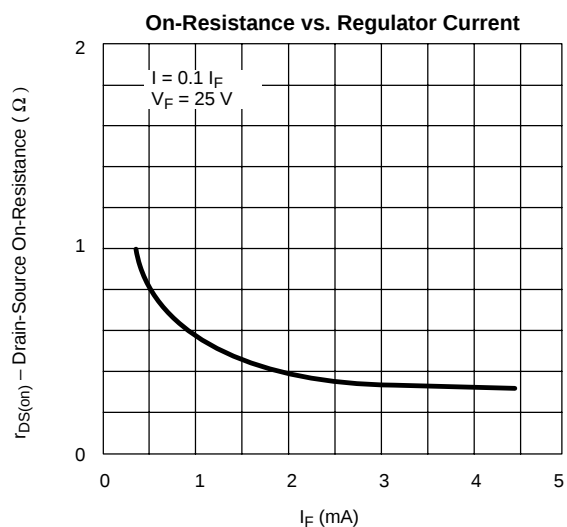
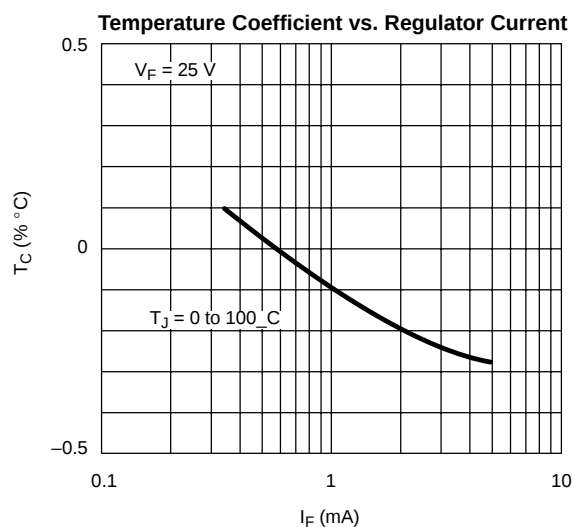
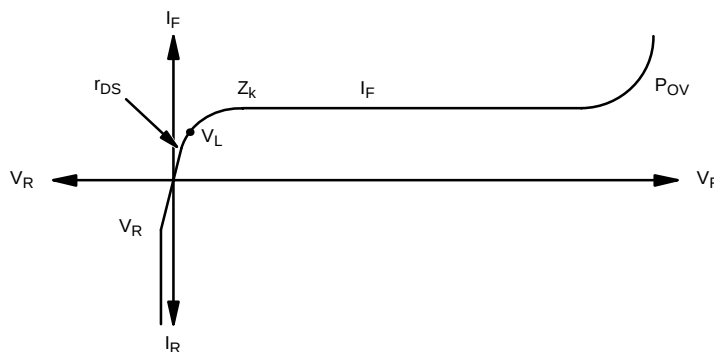
- a. Typical values are for DESIGN AID ONLY, not guaranteed nor subject to production testing.
 b. Max V_F where I_F = 1.1 I_{F(max)} is guaranteed.
 c. Pulse test—steady state currents may vary.
 d. Pulse test—steady state impedances may vary.
 e. Min V_F required to insure I_F = 0.8 I_{F(min)}.

NPA



TYPICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)



TYPICAL CHARACTERISTICS ($T_A = 25^\circ\text{C}$ UNLESS OTHERWISE NOTED)

CURRENT REGULATOR DIODE V-1 CHARACTERISTIC




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