ABSOLUTE MAXIMUM RATINGS

Peak Operating Voltage ..... 100 V
Reverse Current ..... 50 mA
Thermal Resistance (θ_{JA}) ..... 417°C/W

Storage Temperature ..... –55 to 200°C
Power Dissipation[a] ..... 300 mW

Notes:
a. Derate 2.4 mW/°C above 25°C

SPECIFICATIONS (T_A = 25°C UNLESS OTHERWISE NOTED)

Parameter	Symbol	Test Conditions	Limits Min	Limits Typ[a]	Limits Max	Unit
Peak Operating Voltage[b]	P_{OV}	I_F = 1.1 $I_{F(max)}$	100	135		V
Reverse Voltage	V_R	I_R = 1 mA		0.8		V
Capacitance	C_F	V_F = 25 V, f = 1 MHz		6		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
	mA			MΩ		MΩ		V		ppm/°C
Part Number	Min	Nom	Max	Min	Typ[a]	Min	Typ[a]	Max	Typ[a]	Typ[a]
CR160	1.440	1.60	1.760	0.475	1.10	0.092	0.40	1.65	0.70	1000
CR180	1.620	1.80	1.980	0.420	1.00	0.074	0.34	1.75	0.75	650
CR200	1.800	2.00	2.200	0.395	0.90	0.061	0.28	1.85	0.80	300
CR220	1.980	2.20	2.420	0.370	0.83	0.052	0.25	1.95	0.85	100
CR240	2.160	2.40	2.640	0.345	0.76	0.044	0.22	2.00	0.90	0
CR270	2.430	2.70	2.970	0.320	0.70	0.035	0.19	2.15	0.95	–200
CR300	2.700	3.00	3.300	0.300	0.65	0.029	0.16	2.25	1.00	–400
CR330	2.970	3.30	3.630	0.280	0.60	0.024	0.14	2.35	1.05	–550
CR360	3.240	3.60	3.960	0.265	0.54	0.020	0.13	2.50	1.10	–730
CR390	3.510	3.90	4.290	0.255	0.47	0.017	0.12	2.60	1.17	–820
CR430	3.870	4.30	4.730	0.245	0.40	0.014	0.10	2.75	1.25	–1000
CR470	4.230	4.70	5.170	0.235	0.35	0.012	0.09	2.90	1.32	–1125

Notes:
a. Typical values are for DESIGN AID ONLY, not guaranteed nor subject to production testing.
b. Peak voltage at which I_F = 1.1 $I_{F(max)}$.
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 $I_{F(min)}$.

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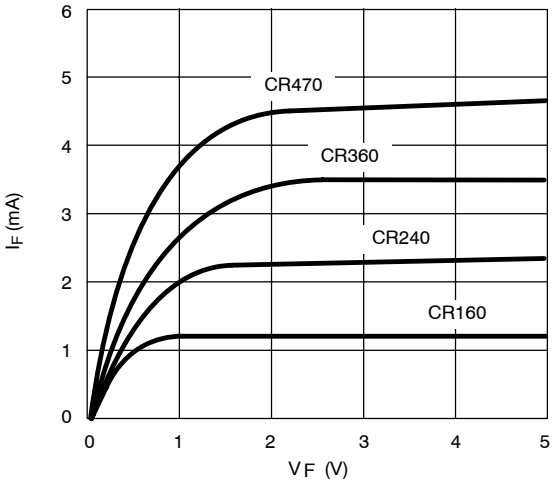
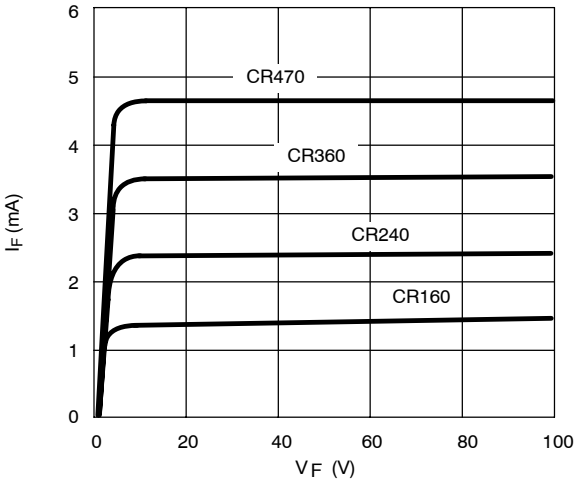
TYPICAL CHARACTERISTICS (T_A = 25°C UNLESS OTHERWISE NOTED)

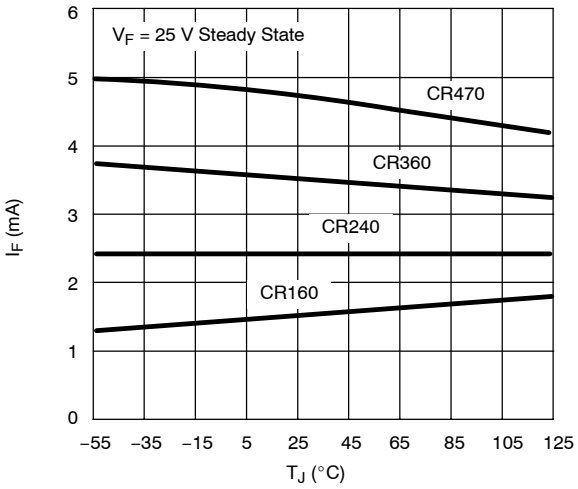
Output Current vs. Forward Voltage



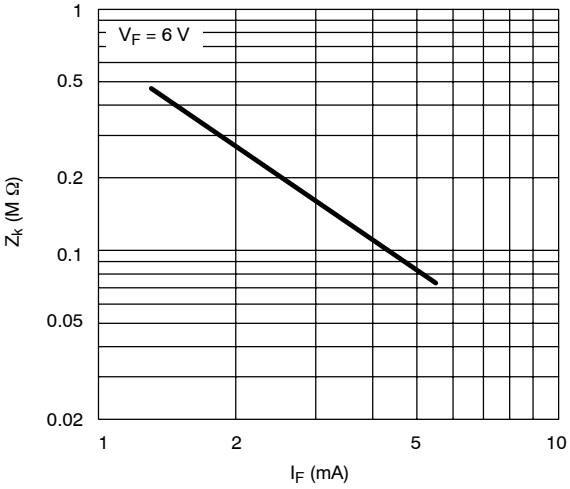
Output Current vs. Forward Voltage



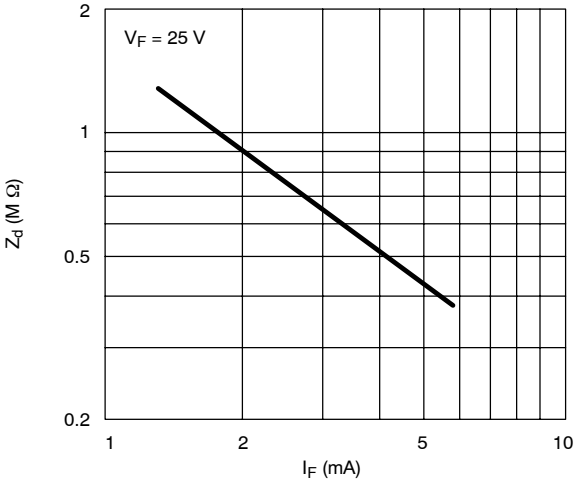
Limiting Current vs. Temperature



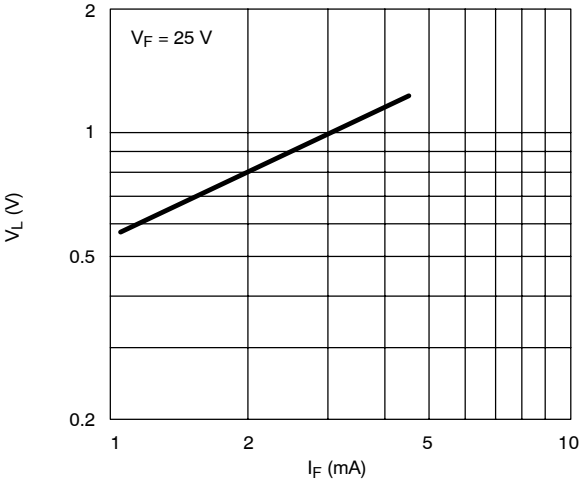
Knee Impedance vs. Regulator Current



Dynamic Impedance vs. Regulator Current

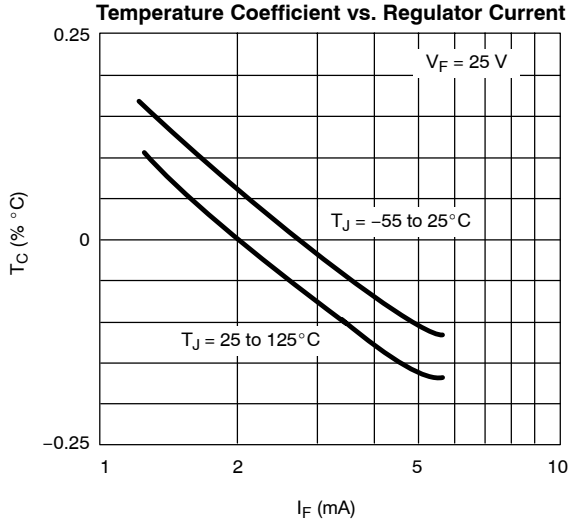


Limiting Voltage @ 0.8 I_F vs. Regulator Current

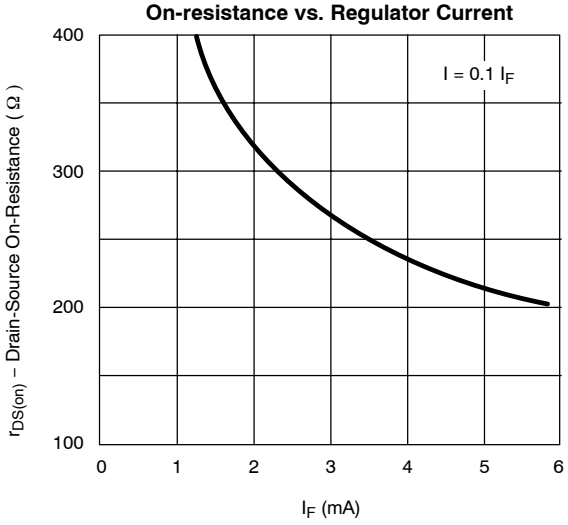


TYPICAL CHARACTERISTICS (T_A = 25°C UNLESS OTHERWISE NOTED)

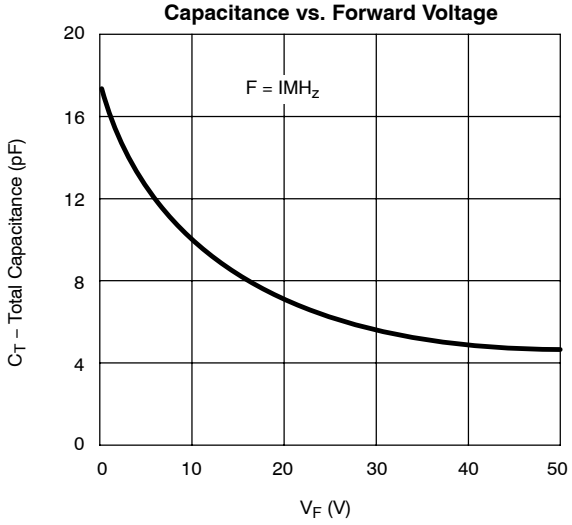
Temperature Coefficient vs. Regulator Current



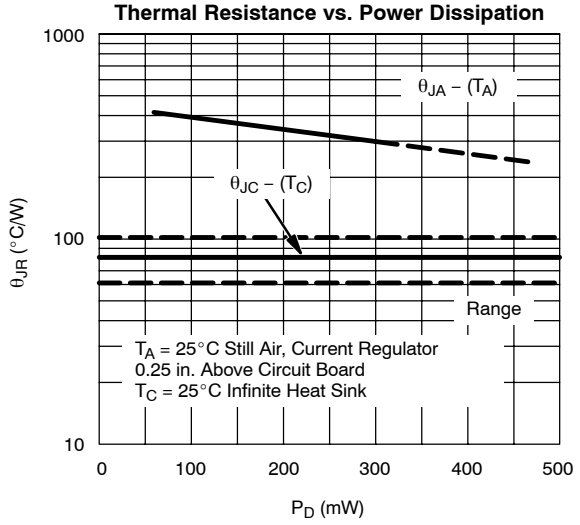
On-resistance vs. Regulator Current



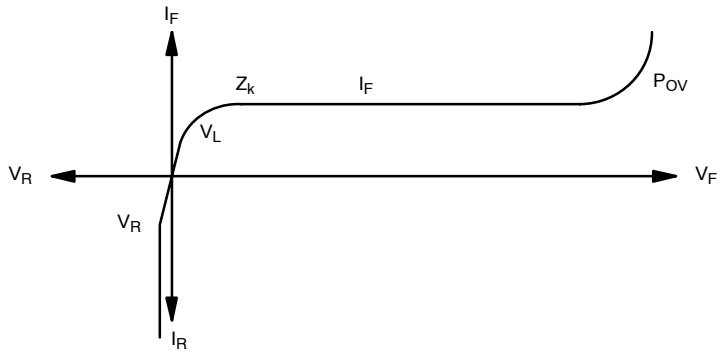
Capacitance vs. Forward Voltage



Thermal Resistance vs. Power Dissipation



CURRENT REGULATOR DIODE V-1 CHARACTERISTIC



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