

CR160 Series

Absolute Maximum Ratings

Peak Operating Voltage	100 V	Power Dissipation	300 mW
Reverse Current	50 mA		
Thermal Resistance (θ_{JA})	417°C/W	Notes:	
Storage Temperature	–55 to 200°C	a. Derate 2.4 mW/°C above 25°C	

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Specifications^a

Parameter	Symbol	Test Conditions	Limits			Unit
			Min	Typ ^b	Max	
Peak Operating Voltage ^c	P _{OV}	I _F = 1.1 I _{F(max)}	100	175		V
Reverse Voltage	V _R	I _R = 1 mA		0.8		
Capacitance	C _F	V _F = 25 V, f = 1 MHz		6		pF

	Regulator Current ^d (I _F)			Dynamic Impedance ^e (Z _d)		Knee Impedance (Z _k)		Limiting Voltage ^f (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		ppm/°C
	Min	Nom	Max	Min	Typ ^b	Min	Typ ^b	Max	Typ ^b	Typ ^b
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:

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- T_A = 25°C unless otherwise noted.
- Typical values are for DESIGN AID ONLY, not guaranteed nor subject to production testing.
- Peak voltage at which I_F = 1.1 I_{F(max)}.
- Pulse test—steady state currents may vary.
- Pulse test—steady state impedances may vary.
- Min V_F required to insure I_F = 0.8 I_{F(min)}.

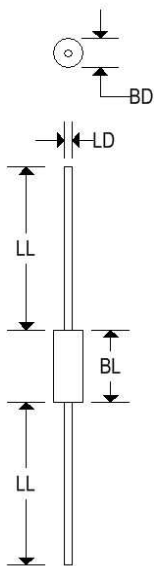
ELECTRICAL CHARACTERISTICS (@ 25°C, unless otherwise specified)

1N5310	3.30	2.97	3.63	0.280	0.024	2.35	100
1N5311	3.60	3.24	3.96	0.265	0.020	2.50	100
1N5312	3.90	3.51	4.29	0.255	0.017	2.60	100
1N5313	4.30	3.87	4.73	0.245	0.014	2.75	100
1N5314	4.70	4.23	5.17	0.235	0.012	2.90	100
1N7048	5.10	4.59	5.61	100	4.0	3.67	80
1N7049	5.60	5.04	6.16	90	4.0	4.03	80
1N7050	6.20	5.58	6.82	80	3.0	4.46	70
1N7051	6.80	6.12	7.48	70	2.0	4.90	70
1N7052	7.50	6.75	8.25	50	1.5	5.40	60
1N7053	8.20	7.38	9.02	30	1.5	5.90	60
1N7054	9.10	8.19	10.01	20	1.0	6.55	50
1N7055	10.00	9.00	11.10	10	1.0	7.20	50

Note 2: Z_s is derived by superimposing a 90Hz RMS signal equal to 10% of V_s on V_s .
Note 3: Z_k is derived by superimposing a 90Hz RMS signal equal to 10% of V_k on V_k .

MECHANICAL CHARACTERISTICS

Case:	DO-35
Marking	Alpha-numeric
Polarity:	Cathode band



	DO-35			
	Inches		Millimeters	
	Min	Max	Min	Max
BD	0.055	0.090	1.400	2.290
BL	0.120	0.200	3.050	5.080
LD	0.018	0.022	0.460	0.560
LL	1.000	1.500	25.400	38.100