Central™
Semiconductor Corp.
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Manufacturers of World Class Discrete Semiconductors

1N5283 THRU 1N5314

CURRENT LIMITING DIODE

JEDEC DO-35 CASE

- LOW COST
- HIGH RELIABILITY
- SMALLER CASE SIZE THAN COMPETITION
- SPECIAL SELECTIONS AVAILABLE
- SUPERIOR LOT TO LOT CONSISTENCY
- SURFACE MOUNT DEVICES AVAILABLE

DESCRIPTION

The CENTRAL SEMICONDUCTOR 1N5283 series types are silicon field effect current regulator diodes designed for applications requiring a constant current over a wide voltage range. These devices are manufactured in the cost effective DO-35 double plug case which provides many benefits to the user including space savings and improved thermal characteristics. Special selections of Ip (regulator current) are available for critical applications. Lower cost units are available in the CCL0035 series.

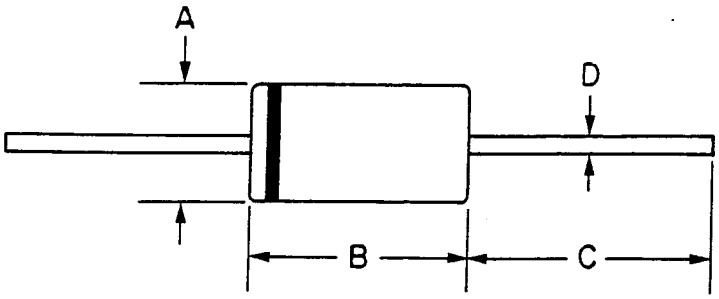
MAXIMUM RATINGS (T_L = 75°C)	**SYMBOL**		**UNIT**
Peak Operating Voltage	POV	100	V
Power Dissipation	P_D	600	mW
Operating and Storage Junction Temperature	T_J, T_{STG}	-65 TO +200	°C

ELECTRICAL CHARACTERISTICS (T_A = 25°C)

TYPE NO.	REGULATOR CURRENT (1)			DYNAMIC IMPEDANCE	KNEE IMPEDANCE	LIMITING VOLTAGE
	I_P @ V_T = 25V			Z_T @ V_T = 25V	Z_K @ V_K = 6.0V	V_L @ I_L = 0.8 Ip MIN
	mA			MΩ	MΩ	V
	MIN	NOM	MAX	MIN	MIN	MAX
1N5283	0.198	0.22	0.242	25.	2.75	1.00
1N5284	0.216	0.24	0.264	19.	2.35	1.00
1N5285	0.243	0.27	0.297	14.	1.95	1.00
1N5286	0.270	0.30	0.330	9.0	1.60	1.00
1N5287	0.297	0.33	0.363	6.6	1.35	1.00
1N5288	0.351	0.39	0.429	4.10	1.00	1.05
1N5289	0.387	0.43	0.473	3.30	0.870	1.05
1N5290	0.423	0.47	0.517	2.70	0.750	1.05
1N5291	0.504	0.56	0.616	1.90	0.560	1.10
1N5292	0.558	0.62	0.682	1.55	0.470	1.13
1N5293	0.612	0.68	0.748	1.35	0.400	1.15
1N5294	0.675	0.75	0.825	1.15	0.335	1.20
1N5295	0.738	0.82	0.902	1.00	0.290	1.25
1N5296	0.819	0.91	1.001	0.880	0.240	1.29
1N5297	0.900	1.00	1.10	0.800	0.205	1.35
1N5298	0.990	1.10	1.21	0.700	0.180	1.40
1N5299	1.08	1.20	1.32	0.640	0.155	1.45
1N5300	1.17	1.30	1.43	0.580	0.135	1.50
1N5301	1.26	1.40	1.54	0.540	0.115	1.55
1N5302	1.35	1.50	1.65	0.510	0.105	1.60
1N5303	1.44	1.60	1.76	0.475	0.092	1.65
1N5304	1.62	1.80	1.98	0.420	0.074	1.75
1N5305	1.80	2.00	2.20	0.395	0.061	1.85
1N5306	1.98	2.20	2.42	0.370	0.052	1.95
1N5307	2.16	2.40	2.64	0.345	0.044	2.00
1N5308	2.43	2.70	2.97	0.320	0.035	2.15
1N5309	2.70	3.00	3.30	0.300	0.029	2.25
1N5310	2.97	3.30	3.63	0.280	0.024	2.35
1N5311	3.24	3.60	3.96	0.265	0.020	2.50
1N5312	3.51	3.90	4.29	0.255	0.017	2.60
1N5313	3.87	4.30	4.73	0.245	0.014	2.75
1N5314	4.23	4.70	5.17	0.235	0.012	2.90

See Reverse for Outline Drawing

(1) PULSED METHOD. PULSE WIDTH (ms) = $\frac{27.5}{\text{Ip NOM (mA)}}$



	INCHES		MILLIMETERS	
DIM	MIN	MAX	MIN	MAX
A	.060	.080	1.52	2.03
B	.140	.160	3.60	4.10
C	1.0	—	25.4	—
D	.018	.022	0.46	0.56

HERMETICALLY SEALED GLASS CASE WITH TINNED COPPER LEADS

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