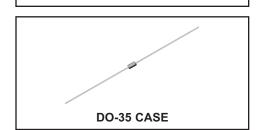
1N5283 THRU 1N5314

SILICON CURRENT LIMITING DIODES





www.centralsemi.com

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.

FEATURES:

- High Reliability
- Special Selections Available
- · Superior Lot To Lot Consistency
- Surface Mount Devices Available

MAXIMUM RATINGS: (T_L=75°C)
Peak Operating Voltage
Power Dissipation
Operating and Storage Junction Temperature

 $\begin{array}{cccc} \textbf{SYMBOL} & \textbf{UNITS} \\ P_{OV} & 100 & V \\ P_{D} & 600 & \text{mW} \\ T_{J}, T_{stg} & -65 \text{ to } +200 & ^{\circ}\text{C} \end{array}$

ELECTRICAL CHARACTERISTICS: (T_A=25°C)

Туре	Regulator Current (Note 1) Ip @ V _T =25V			Minimum Dynamic Impedance	Minimum Knee Impedance	Maximum Limiting Voltage
				Z _T @ V _T =25V	Z _K @ V _K =6.0V	V _L @ I _L =0.8 x I _P MIN
	MIN mA	NOM mA	MAX mA	MΩ	MΩ	V
1N5283	0.187	0.22	0.253	25	2.75	1.0
1N5284	0.204	0.24	0.276	19	2.35	1.0
1N5285	0.230	0.27	0.311	14	1.95	1.0
1N5286	0.255	0.30	0.345	9.0	1.60	1.0
1N5287	0.281	0.33	0.380	6.6	1.35	1.0
1N5288	0.332	0.39	0.449	4.1	1.00	1.05
1N5289	0.366	0.43	0.495	3.3	0.87	1.05
1N5290	0.400	0.47	0.541	2.7	0.75	1.05
1N5291	0.476	0.56	0.644	1.90	0.56	1.10
1N5292	0.527	0.62	0.713	1.55	0.47	1.13
1N5293	0.578	0.68	0.782	1.35	0.40	1.15
1N5294	0.638	0.75	0.863	1.15	0.335	1.20
1N5295	0.697	0.82	0.943	1.00	0.29	1.25
1N5296	0.774	0.91	1.05	0.88	0.24	1.29
1N5297	0.850	1.00	1.15	0.80	0.205	1.35
1N5298	0.935	1.10	1.27	0.70	0.18	1.40

Notes: (1) Pulsed Method: Pulse Width (ms) = 27.5 divided by Ip NOM (mA)

R4 (7-February 2013)

1N5283 THRU 1N5314

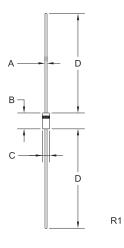




$\textbf{ELECTRICAL CHARACTERISTICS - Continued:} \ (T_{\mbox{A}} = 25^{\circ}\mbox{C})$

Туре	Regulator Current (Note 1)			Minimum Dynamic Impedance	Minimum Knee Impedance	Maximum Limiting Voltage
	I _P @ V _T =25V			Z _T @ V _T =25V	Z _K @ V _K =6.0V	V _L @ I _L =0.8 x I _P MIN
	MIN mA	NOM mA	MAX mA	MΩ	МΩ	V
1N5299	1.02	1.20	1.38	0.640	0.155	1.45
1N5300	1.11	1.30	1.50	0.580	0.135	1.50
1N5301	1.19	1.40	1.61	0.540	0.115	1.55
1N5302	1.28	1.50	1.73	0.510	0.105	1.60
1N5303	1.36	1.60	1.84	0.475	0.092	1.65
1N5304	1.53	1.80	2.07	0.420	0.074	1.75
1N5305	1.70	2.00	2.30	0.395	0.061	1.85
1N5306	1.87	2.20	2.53	0.370	0.052	1.95
1N5307	2.04	2.40	2.76	0.345	0.044	2.00
1N5308	2.30	2.70	3.11	0.320	0.035	2.15
1N5309	2.55	3.00	3.45	0.300	0.029	2.25
1N5310	2.81	3.30	3.80	0.280	0.024	2.35
1N5311	3.06	3.60	4.14	0.265	0.020	2.50
1N5312	3.32	3.90	4.49	0.255	0.017	2.60
1N5313	3.66	4.30	4.95	0.245	0.014	2.75
1N5314	4.00	4.70	5.41	0.235	0.012	2.90

DO-35 CASE - MECHANICAL OUTLINE



DIMENSIONS									
	INC	HES	MILLIMETERS						
SYMBOL	MIN	MAX	MIN	MAX					
Α	0.018	0.022	0.46	0.56					
В	0.120	0.200	3.05	5.08					
С	0.060	0.090	1.52	2.29					
D	1.000	_	25.40	_					

DO-35 (REV: R1)

R4 (7-February 2013)

OUTSTANDING SUPPORT AND SUPERIOR SERVICES



PRODUCT SUPPORT

Central's operations team provides the highest level of support to insure product is delivered on-time.

- Supply management (Customer portals)
- · Inventory bonding
- · Consolidated shipping options

- · Custom bar coding for shipments
- · Custom product packing

DESIGNER SUPPORT/SERVICES

Central's applications engineering team is ready to discuss your design challenges. Just ask.

- Free guick ship samples (2nd day air)
- Online technical data and parametric search
- SPICE models
- · Custom electrical curves
- · Environmental regulation compliance
- · Customer specific screening
- · Up-screening capabilities

- Special wafer diffusions
- PbSn plating options
- Package details
- Application notes
- · Application and design sample kits
- Custom product and package development

REQUESTING PRODUCT PLATING

- 1. If requesting Tin/Lead plated devices, add the suffix "TIN/LEAD" to the part number when ordering (example: 2N2222A TIN/LEAD).
- 2. If requesting Lead (Pb) Free plated devices, add the suffix "PBFREE" to the part number when ordering (example: 2N2222A PBFREE).

CONTACT US

Corporate Headquarters & Customer Support Team

Central Semiconductor Corp. 145 Adams Avenue Hauppauge, NY 11788 USA

Main Tel: (631) 435-1110 Main Fax: (631) 435-1824

Support Team Fax: (631) 435-3388

www.centralsemi.com

Worldwide Field Representatives: www.centralsemi.com/wwreps

Worldwide Distributors:

www.centralsemi.com/wwdistributors

For the latest version of Central Semiconductor's **LIMITATIONS AND DAMAGES DISCLAIMER**, which is part of Central's Standard Terms and Conditions of sale, visit: www.centralsemi.com/terms

www.centralsemi.com (001)

Mouser Electronics

Authorized Distributor

Click to View Pricing, Inventory, Delivery & Lifecycle Information:

Central Semiconductor:

1N5283 1N5285 1N5289 1N5292 1N5293 1N5297 1N5308 1N5310 1N5311 1N5300 1N5284 1N5286

1N5287 1N5288 1N5290 1N5291 1N5294 1N5295 1N5296 1N5298 1N5299 1N5301 1N5302 1N5303 1N5304

1N5309 1N5312 1N5307_PB 1N5314 1N5294 TR 1N5284 TR 1N5304 TR 1N5301 TR 1N5290 TR 1N5283 TR

1N5293 TR 1N5300 TR 1N5307 TR 1N5287 TR 1N5310 TR 1N5285 TR 1N5298 TR 1N5298 TR 1N5296 TR

1N5288 TR 1N5312 TR 1N5291 TR 1N5313 TR 1N5297 TR 1N5289 TR 1N5308 TR 1N5295 TR 1N5314 TR

1N5311 TR 1N5303 TR 1N5309 TR 1N5309 TR 1N5299 TR 1N5305 TR 1N5292 TR 1N5302 TR 1N5299 BK 1N5310 BK

1N5314 BK 1N5309 BK 1N5311 BK PBFREE