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## CURRENT REGULATOR DIODES

- HIGH SOURCE IMPEDANCE
- METALLURGICALLY BONDED
- DOUBLE PLUG CONSTRUCTION

Qualified per MIL-PRF-19500/463

### DEVICES

**\* 1N5283 Thru 1N5314**  
**1N5283-1 Thru 1N5314-1**

\* These devices are only available as Commercial Level Product.

### QUALIFIED LEVELS

**JAN**  
**JANTX**  
**JANTXV**  
**JANS**

### MAXIMUM RATING AT 25°C

Operating Temperature:	-65°C to +175°C
Storage Temperature:	-65°C to +175°C
DC Power Dissipation:	500mW @ +50°C @ $T_L = 3/8''$
Power Derating:	4mW / °C above +50°C
Peak Operating Voltage:	100 Volts

### ELECTRICAL CHARACTERISTICS ( $T_A = 25^\circ\text{C}$ , unless otherwise specified)

TYPE NUMBER	REGULATOR CURRENT $I_p$ (mA) @ $V_s = 25V$			MINIMUM DYNAMIC IMPEDANCE @ $V_s = 25$ $Z_s$ (M) (Note 1)	MINIMUM KNEE IMPEDANCE @ $V_k = 6.0V$ $Z_k$ (M) (Note 2)	MAXIMUM LIMITING VOLTAGE @ $I_L = 0.8 I_p$ (min) $V_L$ (VOLTS)
	NOM	MIN	MAX			
1N5283	0.22	0.198	0.242	25.0	2.75	1.00
1N5284	0.24	0.216	0.264	19.0	2.35	1.00
1N5285	0.27	0.243	0.297	14.0	1.95	1.00
1N5286	0.30	0.270	0.330	9.0	1.60	1.00
1N5287	0.33	0.297	0.363	6.6	1.35	1.00
1N5288	0.39	0.351	0.429	4.10	1.00	1.05
1N5289	0.43	0.387	0.473	3.30	0.870	1.05
1N5290	0.47	0.423	0.517	2.70	0.750	1.05
1N5291	0.56	0.504	0.616	1.90	0.560	1.10
1N5292	0.62	0.558	0.682	1.55	0.470	1.13
1N5293	0.68	0.612	0.748	1.35	0.400	1.15
1N5294	0.75	0.675	0.825	1.15	0.335	1.20
1N5295	0.82	0.738	0.902	1.00	0.290	1.25
1N5296	0.91	0.819	1.001	0.880	0.240	1.29
1N5297	1.00	0.900	1.100	0.800	0.205	1.35
1N5298	1.10	0.990	1.210	0.700	0.180	1.40
1N5299	1.20	1.08	1.32	0.640	0.155	1.45
1N5300	1.30	1.17	1.43	0.580	0.135	1.50
1N5301	1.40	1.26	1.54	0.540	0.115	1.55
1N5302	1.50	1.35	1.65	0.510	0.105	1.60
1N5303	1.60	1.44	1.76	0.475	0.092	1.65
1N5304	1.80	1.62	1.98	0.420	0.074	1.75
1N5305	2.00	1.80	2.20	0.395	0.061	1.85
1N5306	2.20	1.98	2.42	0.370	0.052	1.95
1N5307	2.40	2.16	2.64	0.345	0.044	2.00
1N5308	2.70	2.43	2.97	0.320	0.035	2.15
1N5309	3.00	2.70	3.30	0.300	0.029	2.25
1N5310	3.30	2.97	3.63	0.280	0.024	2.35
1N5311	3.60	3.24	3.96	0.265	0.020	2.50
1N5312	3.90	3.51	4.29	0.255	0.017	2.60
1N5313	4.30	3.87	4.73	0.245	0.014	2.75
1N5314	4.70	4.23	5.17	0.235	0.012	2.90

**NOTE 1:**  $Z_s$  is derived by superimposing A 90Hz RMS signal equal to 10% of  $V_s$  on  $V_s$

**NOTE 2:**  $Z_k$  is derived by superimposing A 90Hz RMS signal equal to 10% of  $V_k$  on  $V_k$



**DO-35**