TECHNICAL DATA SHEET

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Website: http: //www.microsemi.com

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 ***(TA = 25°C, unless otherwise specified)***

TYPE NUMBER	REGULATOR CURRENT Ip (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 Ip (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

DO-35

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