1N4954US THRU 1N4990US Surface Mount(US), 5 WATT Voltage Regulators

POWER DISCRETES

Description

Quick reference data

V_R = 6.8 - 220V
I_Z (MAX) = 21.6mA - 700mA
Z_Z = 1Ω - 550Ω
I_R = 2µA - 150µA

Features

- Low dynamic impedance
- Hermetically sealed.
- 5 Watt applications
- Low reverse leakage currents
- Thermal Resistance to end cap $R_{\text{øJEC}}$ = 6 C/W

These products are qualified to MIL-PRF-19500/356. They can be supplied fully released as JAN, JANTX, JANTXV and JANS versions

Electrical Specifications

Electrical specifications @ T_A = 25°C unless otherwise specified.

Device Types	V_Z Nom	V_Z Min	V_Z Max	I_Z Test Current T_A=+25°C	Z_Z Imped.	Z_K Knee Imped.	I_Z Max DC Current	V_z (reg) Voltage Reg.	I_{ZSM} @ T_A= +25°C	V_R Reverse Voltage	I_R Reverse Current DC	α VZ Temp. Coeff.	I_R Reverse Current DC T_A=+150°C	I_{ZK} Test Current
	V	V	V	mA	Ω	Ω	mA	V	A	V	µA	%/ °C	µA	mA
1N4954US	6.8	6.46	7.14	175	1	1000	700	.7	29.3	5.2	150	.05	750	1.0
1N4955US	7.5	7.13	7.87	175	1.5	800	630	.7	26.4	5.7	100	.06	500	1.0
1N4956US	8.2	7.79	8.61	150	1.5	600	580	.7	24	6.2	50	.06	300	1.0
1N4957US	9.1	8.65	9.55	150	2	400	520	.7	22	6.9	25	.06	200	1.0
1N4958US	10.0	9.50	10.50	125	2	125	475	.8	20	7.6	25	.07	200	1.0
1N4959US	11.0	10.45	11.55	125	2.5	130	430	.8	19	8.4	10	.07	150	1.0
1N4960US	12.0	11.40	12.60	100	2.5	140	395	.8	18	9.1	10	.07	150	1.0
1N4961US	13.0	12.35	13.65	100	3	145	365	.9	16	9.9	10	.08	150	1.0
1N4962US	15	14.25	15.75	75	3.5	150	315	1.0	12	11.4	5.0	.08	100	1.0
1N4963US	16	15.20	16.80	75	3.5	155	294	1.1	10	12.2	5.0	.08	100	1.0
1N4964US	18	17.10	18.90	65	4.0	160	264	1.2	9.0	13.7	5.0	.085	100	1.0
1N4965US	20	19.00	21.00	65	4.5	165	237	1.5	8.0	15.2	2.0	.085	100	1.0
1N4966US	22	20.90	23.10	50	5.0	170	216	1.8	7.0	16.7	2.0	.085	100	1.0
1N4967US	24	22.8	25.2	50	5	175	198	2.0	6.5	18.2	2.0	.09	100	1.0
1N4968US	27	25.7	28.3	50	6	180	176	2.0	6.0	20.6	2.0	.09	100	1.0
1N4969US	30	28.5	31.5	40	8	190	158	2.5	5.5	22.8	2.0	.09	100	1.0
1N4970US	33	31.4	34.6	40	10	200	144	2.8	5.0	25.1	2.0	.095	100	1.0

POWER DISCRETES

Electrical Specifications (Cont.)

Electrical specifications @ T_A = 25°C unless otherwise specified.

Device Types	V_Z Nom	V_Z Min	V_Z Max	I_Z Test Current T_A=+25°C	Z_Z Imped.	Z_K Knee Imped.	I_Z Max DC Current	V_z (reg) Voltage Reg.	I_{ZSM} @ T_A= +25°C	V_R Reverse Voltage	I_R Reverse Current DC	α VZ Temp. Coeff.	I_R Reverse Current DC T_A=+150°C	I_{ZK} Test Current
	V	V	V	mA	Ω	Ω	mA	V	A	V	µA	%/°C	µA	mA
1N4971US	36	34.2	37.8	30	11	220	132	3.0	4.5	27.4	2.0	.095	100	1.0
1N4972US	39	37.1	40.9	30	14	230	122	3.0	4.0	29.7	2.0	.095	100	1.0
1N4973US	43	40.9	45.1	30	20	240	110	3.3	3.5	32.7	2.0	.095	100	1.0
1N4974US	47	44.7	49.3	25	25	250	100	3.5	3.2	35.8	2.0	.095	100	1.0
1N4975US	51	48.5	53.5	25	27	270	92	4.0	3.0	38.8	2.0	.095	100	1.0
1N4976US	56	53.2	58.8	20	35	320	84	4.4	2.8	42.6	2.0	.095	100	1.0
1N4977US	62	58.9	65.1	20	42	400	76	5.0	2.5	47.1	2.0	.100	100	1.0
1N4978US	68	64.6	71.4	20	50	500	70	5.5	2.2	51.7	2.0	.100	100	1.0
1N4979US	75	71.3	78.7	20	55	620	63	6.0	2.0	56	2.0	.100	100	1.0
1N4980US	82	77.9	86.1	15	80	720	58	6.6	1.8	62.2	2.0	.100	100	1.0
1N4981US	91	86.5	95.5	15	90	760	52.5	7.5	1.6	69.2	2.0	.100	100	1.0
1N4982US	100	95.0	105	12	110	800	47.5	8.0	1.4	76.0	2.0	.100	100	1.0
1N4983US	110	104.5	115.5	12	125	1000	43	9.0	1.2	83.6	2.0	.100	100	1.0
1N4984US	120	114.0	126.0	10	170	1150	39.5	10	1.0	91.2	2.0	.100	100	1.0
1N4985US	130	123.5	136.5	10	190	1250	36.6	11	.8	98.8	2.0	.105	100	1.0
1N4986US	150	142.5	157.5	8	330	1500	31.6	13	.75	114.0	2.0	.105	100	1.0
1N4987US	160	152	168	8	350	1650	29.4	14	.70	121.6	2.0	.105	100	1.0
1N4988US	180	171	189	5	450	1750	26.4	16	.60	136.8	2.0	.110	100	1.0
1N4989US	200	190	210	5	500	1850	23.6	18	.50	152.0	2.0	.110	100	1.0
1N4990US	220	209	231	5	550	2000	21.6	19	50	167.0	2.0	0.115	100	1.0

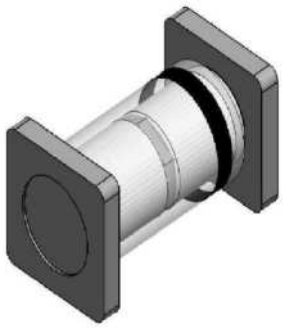
Notes:
(1) Operating Temperature: -55°C to 175℃ .
(2) Storage Temperature: -65°C to 175℃ .

POWER DISCRETES

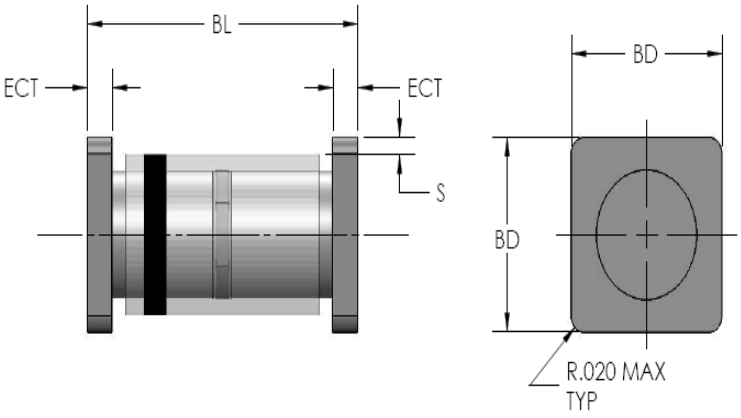
Ordering Information

Part Number	Description
1N4954US THRU 1N4990US	Surface Mount(1)

Note:
(1) Available in bulk or tape and reel packaging. Please consult factory for quantities.



Outline Drawing



Dimensions					
DIM[N]	Inches		Millimeters		Note
	MIN	MAX	MIN	MAX	
BL	.200	.225	5.08	5.72	-
ECT	0.019	0.028	0.48	0.72	-
S	0.003			0.08	-
BD	0.137	0.148	3.48	3.76	-

Contact Information

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