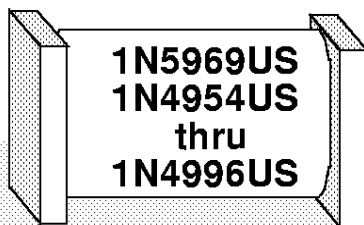


Square ended SMD



5 watt Voidless Zeners

Hard Glass Tungsten
MELF "B" Package

Applications

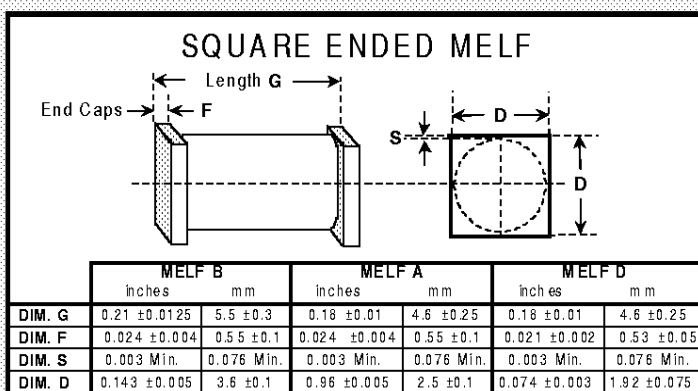
For use in hostile environments such as military and aerospace. Used where performance, surge and small footprint are important. This zener series is ideal to use for regulation, clipping or protection.

Reliability levels

These SMD parts are available in JAN, JTX, JTXV and JANS levels per MIL-S-19500/356. Axial leaded packages are also available.

Features

- Six Sigma quality
- High surge capability
- Microminiature package
- Humidity proof hard glass
- No thermal fatigue
- Metallurgically bonded
- Thermally matched system
- Zero solderability defects
- Sigma Bond™ plated contacts
- Available in commercial versions



Absolute Maximum Ratings	Symbol	Value	Unit
Power Dissipation at $T_{EC} = 100^{\circ}\text{C}$	P_D	5.0	Watts
Maximum Operating Temperature Range	T_{Op}	-65 to +175	$^{\circ}\text{C}$
Storage Temperature Range	T_{St}	-65 to +200	$^{\circ}\text{C}$
Exponential peak power surge for 1 mSec.@ 50% of I_p	P_{pk}	250	Watts

Characteristics at $T = 25^{\circ}\text{C}$	Symbol	Limit	Unit
Power Derating at $T_{EC} = 100^{\circ}\text{C}$	P_{DR}	50 (Max)	mW/ $^{\circ}\text{C}$
BKC Forward Voltage at $I_F = 1.0\text{ A}$	V_F	1.2 (Max)	Volts

To order, use the listed part numbers with the appropriate JAN, JTX, JTXV or JANS prefix.
Consult factory for availability.

DETAILED SPECIFICATIONS ON REVERSE

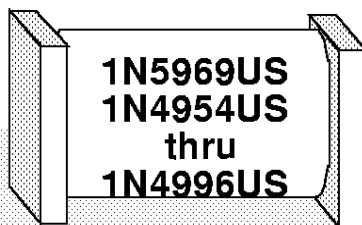


BKC Semiconductors Inc.

6 Lake St · Lawrence, MA · 01841 · tel: (978) 681-0392 · fax: (978) 681-9135

Square ended SMD

1N5969US and
1N4954US thru
1N4996US series



5 watt Voidless Zeners

5 watt MELF "B"
Detail
Specifications

Type	Nominal Zener Voltage (V _Z) @ I _{ZT} Volts	Test Current I _{ZT} mA	Maximum Zener Impedance (Z _Z) @ I _{ZT} (Z _{ZK}) @ I _{ZK} = 1 mA Ohms Ohms		Regulation Factor (V _Z) Volts	Maximum Reverse Leakage Current (I _R) µA @ V _R Volts		Typical Temperature Coeff. (T _C) @ I _{ZT} %/°C	Maximum Continuous Current (I _{ZM}) mA	Maximum Surge Current (I _{ZSM}) Amps
1N5969US	6.2	220	1.0	1000	0.5	1000	4.74	0.04	765	20
1N4954US	6.8	175	1.0	1000	0.7	150	5.2	0.05	700	40
1N4955US	7.5	175	1.5	800	0.7	100	5.7	0.06	630	32
1N4956US	8.2	150	1.5	600	0.7	50	6.2	0.06	580	24
1N4957US	9.1	150	2.0	400	0.7	25	6.9	0.06	520	22
1N4958US	10.0	125	2.0	125	0.8	25	7.6	0.07	475	20
1N4959US	11	125	2.5	130	0.8	10	8.4	0.07	430	19
1N4960US	12	100	2.5	140	0.8	10	9.1	0.07	395	18
1N4961US	13	100	3.0	145	0.8	10	9.9	0.08	365	16
1N4962US	15	75	3.5	150	1.0	5	11.4	0.08	315	12
1N4963US	16	75	3.5	155	1.1	5	12.2	0.08	294	10
1N4964US	18	65	4.0	160	1.2	5	13.7	0.085	264	9.0
1N4965US	20	65	4.5	165	1.5	2	15.2	0.085	237	8.0
1N4966US	22	50	5.0	170	1.8	2	16.7	0.085	216	7.0
1N4967US	24	50	5.0	175	2.0	2	18.2	0.090	198	6.5
1N4968US	27	50	6.0	180	2.0	2	20.6	0.090	176	6.0
1N4969US	30	40	8	190	2.5	2	22.8	0.090	158	5.5
1N4970US	33	40	10	200	2.8	2	25.1	0.095	144	5.0
1N4971US	36	30	11	220	3.0	2	27.4	0.095	132	4.5
1N4972US	39	30	14	230	3.0	2	29.7	0.095	122	4.0
1N4973US	43	30	20	240	3.3	2	32.7	0.095	110	3.5
1N4974US	47	25	25	250	3.5	2	35.8	0.095	100	3.2
1N4975US	51	25	27	270	4.0	2	38.8	0.095	92	3.0
1N4976US	56	20	35	320	4.4	2	42.6	0.095	84	2.8
1N4977US	62	20	42	400	5.0	2	47.1	0.100	76	2.5
1N4978US	68	20	50	500	5.5	2	51.7	0.100	70	2.2
1N4979US	75	20	55	620	6.0	2	56.0	0.100	63.0	2.0
1N4980US	82	15	80	720	6.6	2	62.2	0.100	58.0	1.8
1N4981US	91	15	90	760	7.5	2	69.2	0.100	52.5	1.6
1N4982US	100	12	110	800	8.0	2	76.0	0.100	47.5	1.4
1N4983US	110	12	125	1000	9.0	2	83.6	0.100	43.0	1.2
1N4984US	120	10	170	1150	10	2	91.2	0.100	39.5	1.0
1N4985US	130	10	190	1250	11	2	98.8	0.105	36.6	0.80
1N4986US	150	8.0	330	1500	13	2	114	0.105	31.6	0.75
1N4987US	160	8.0	350	1650	14	2	121.6	0.105	29.4	0.70
1N4988US	180	5.0	430	1750	16	2	136.8	0.110	26.4	0.60
1N4989US	200	5.0	480	1850	18	2	152	0.110	23.6	0.50
1N4990US	220	5.0	550	2000	19	2	167	0.115	21.6	0.05
1N4991US	240	5.0	650	2050	22	2	182	0.115	19.8	0.40
1N4992US	270	5.0	800	2100	25	2	206	0.120	17.5	0.35
1N4993US	300	4.0	950	2150	28	2	228	0.120	15.6	0.30
1N4994US	330	4.0	1175	2200	32	2	251	0.120	14.4	0.25
1N4995US	360	3.0	1400	2300	35	2	274	0.120	13.0	0.22
1N4996US	390	3.0	1800	2500	40	2	297	0.120	12.0	0.20

Nominal zener voltage is $\pm 5\%$ tolerance. Other tolerances available upon request.

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