

TM

SUSSEX SEMICONDUCTOR, INC.

Zeners

SECTION 6



SUSSEX

SEMICONDUCTOR, INC.

12251 TOWNE LAKE DRIVE, FORT MYERS, FLORIDA, 33913 • TEL: (239) 768-6800 • FAX: (239) 768-6868

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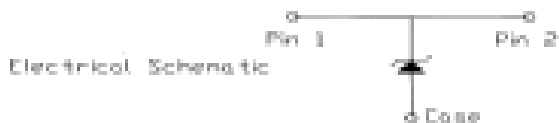
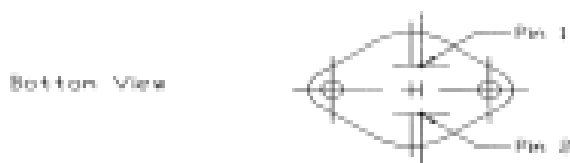
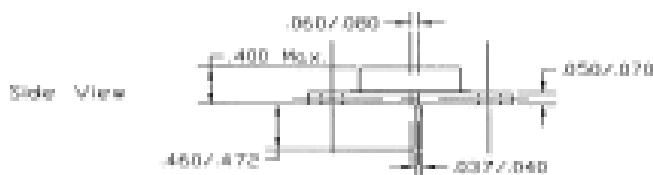
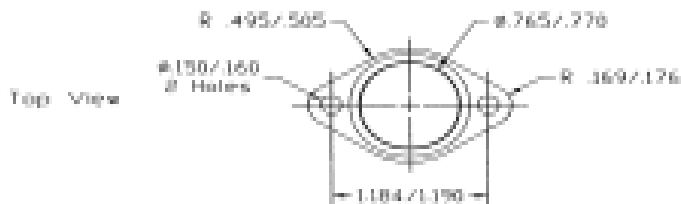


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**50 WATT MAX
TO - 3 ZENERS**



All Dimensions in Inches

GLASS PASSIVATED TO-3 ZENER

ZENER VOLTAGES - 6.8 TO 200 VOLTS

50 WATT MAXIMUM POWER DISSIPATION

TO - 3 DEVICE SPECIFICATIONS

- ◆ Hermetically Sealed Metal Package
- ◆ Designed for Military and Industrial Use
- ◆ Each Device Individually Inspected
- ◆ Standard Polarity Anode to Case
- ◆ Available Tolerances: $\pm 5\%$, $\pm 10\%$, $\pm 20\%$
- ◆ Standard TO-3 Package With .040" Nom. Dia. Pins
- ◆ Operating and Storage Temperature: -65°C to $+150^{\circ}\text{C}$
- ◆ Forward Voltage @ 10A: 1.5V
- ◆ Copper Leads Provide Secure Connections and Good Conductivity

TO3 CUSTOM ORDERING SPECIFIER

DIE SPECIFICATIONS

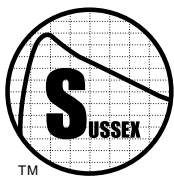
TO3 - SZ 35 - 6.8 - 5 - 1850 -

DEVICE CODE ZENER DIE NOMINAL ZENER VOLTAGE ZENER TEST CURRENT

AVAILABLE SIZES	
CODE	DIE SIZE
35*	.200sq
30	.180sq
25	.165sq
*50W DEVICE MUST USE .200sq DIE	

TOLERANCE	
CODE	TOLERANCE
5	$\pm 5\%$
10	$\pm 10\%$
20	$\pm 20\%$

- ◆ BLANK - INDICATES STANDARD POLARITY ANODE TO CASE
- ◆ R - INDICATES REVERSE POLARITY CATHODE TO CASE



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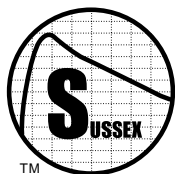
TO-3 - CONTINUED

TABLE 1A - STANDARD DEVICE ELECTRICAL SPECIFICATIONS (NOTE 1)

JEDEC PART NUMBER	SUSSEX PART NUMBER	NOMINAL ZENER VOLTAGE $V_Z @ I_{ZT}$ (NOTE 2) VOLTS	ZENER TEST CURRENT (I_{ZT}) mA	MAX. ZENER IMPEDANCE (NOTE 3)		MAX. DC ZENER CURRENT $(I_{ZM}) @ 75^{\circ}\text{C}$ STUD TEMP. (NOTE 4) mA	TYPICAL ZENER VOLTAGE TEMP. COEFF. % / $^{\circ}\text{C}$	MAXIMUM LEAKAGE CURRENT $I_R @ V_R$	
				$Z_{ZT} @ I_{ZT}$ OHMS	$Z_{ZK} @ 5\text{mA } (I_{ZK})$ OHMS			μA	V
1N2804B	TO3-SZ35-6.8-5-1850	6.8	1850	0.2	70	7400	.040	150	4.5
1N2805B	TO3-SZ35-7.5-5-1700	7.5	1700	0.3	70	6600	.045	100	5.0
1N2806B	TO3-SZ35-8.2-5-1500	8.2	1500	0.4	70	5800	.048	50	5.4
1N2807B	TO3-SZ35-9.1-5-1370	9.1	1370	0.5	70	5300	.050	25	6.1
1N2808B	TO3-SZ35-10-5-1200	10.0	1200	0.6	80	4800	.055	25	6.7
1N2809B	TO3-SZ35-11-5-1100	11.0	1100	0.8	80	4300	.060	10	8.4
1N2810B	TO3-SZ35-12-5-1000	12.0	1000	1.0	80	4000	.065	10	9.1
1N2811B	TO3-SZ35-13-5-960	13.0	960	1.1	80	3700	.065	10	9.9
1N2812B	TO3-SZ35-14-5-890	14.0	890	1.2	80	3400	.070	10	10.6
1N2813B	TO3-SZ35-15-5-830	15.0	830	1.4	80	3100	.070	10	11.4
1N2814B	TO3-SZ35-16-5-780	16.0	780	1.6	80	2950	.070	10	12.2
1N2815B	TO3-SZ35-17-5-740	17.0	740	1.8	80	2750	.075	10	13.0
1N2816B	TO3-SZ35-18-5-700	18.0	700	2.0	80	2550	.075	10	13.7
1N2817B	TO3-SZ35-19-5-660	19.0	660	2.2	80	2450	.075	10	14.4
1N2818B	TO3-SZ35-20-5-630	20.0	630	2.4	80	2350	.075	10	15.2
1N2819B	TO3-SZ35-22-5-570	22.0	570	2.5	80	2100	.080	10	16.7
1N2820B	TO3-SZ35-24-5-520	24.0	520	2.6	80	1950	.080	10	18.2
1N2821B	TO3-SZ35-25-5-500	25.0	500	2.7	90	1850	.080	10	19.0
1N2822B	TO3-SZ35-27-5-460	27.0	460	2.8	90	1650	.085	10	20.6
1N2823B	TO3-SZ35-30-5-420	30.0	420	3.0	90	1550	.085	10	22.8
1N2824B	TO3-SZ35-33-5-380	33.0	380	3.2	90	1450	.085	10	25.1
1N2825B	TO3-SZ35-36-5-350	36.0	350	3.5	90	1300	.085	10	27.4
1N2826B	TO3-SZ35-39-5-320	39.0	320	4.0	90	1175	.090	10	29.7
1N2827B	TO3-SZ35-43-5-290	43.0	290	4.5	90	1075	.090	10	32.7
1N2828B	TO3-SZ35-45-5-280	45.0	280	4.5	100	1030	.090	10	34.2
1N2829B	TO3-SZ35-47-5-270	47.0	270	5.0	100	950	.090	10	35.8
1N2830B	TO3-SZ35-50-5-250	50.0	250	5.0	100	935	.090	10	38.0
1N2831B	TO3-SZ35-51-5-245	51.0	245	5.2	100	925	.090	10	38.8
1N2832B	TO3-SZ35-56-5-220	56.0	220	6.0	110	825	.090	10	42.6
1N2833B	TO3-SZ35-62-5-200	62.0	200	7.0	120	735	.090	10	47.1
1N2834B	TO3-SZ35-68-5-180	68.0	180	8.0	140	670	.090	10	51.7
1N2835B	TO3-SZ35-75-5-170	75.0	170	9.0	150	600	.090	10	56.0
1N2836B	TO3-SZ35-82-5-150	82.0	150	11	160	550	.090	10	62.2
1N2837B	TO3-SZ35-91-5-140	91.0	140	15	180	470	.090	10	69.2
1N2838B	TO3-SZ35-100-5-120	100.0	120	20	200	450	.090	10	76.0
1N2839B	TO3-SZ35-105-5-120	105.0	120	25	210	430	.095	10	79.8
1N2840B	TO3-SZ35-110-5-110	110.0	110	30	220	410	.095	10	83.6
1N2841B	TO3-SZ35-120-5-100	120.0	100	40	240	375	.095	10	91.2
1N2842B	TO3-SZ35-130-5-95	130.0	95	50	275	345	.095	10	98.8
1N2843B	TO3-SZ35-150-5-85	150.0	85	75	400	300	.095	10	114.0
1N2844B	TO3-SZ35-160-5-80	160.0	80	80	450	285	.095	10	121.6
1N2845B	TO3-SZ35-180-5-68	180.0	68	90	525	250	.095	10	136.8
1N2846B	TO3-SZ35-200-5-65	200.0	65	100	600	220	.100	10	152.0

NOTES

- NOTE 1** ♦ ELECTRICAL CHARACTERISTICS MEASURED AT 25°C UNLESS OTHERWISE STATED.
♦ TABLE DEMONSTRATES DEVICE CHARACTERISTICS FOR A 50W DEVICE (SZ35 CHIP).
- NOTE 2** ♦ V_Z MEASURED AT JUNCTION AND CASE TEMPERATURE BOTH AT 25°C .
♦ I_{ZT} IS SELECTED SO THAT A CONSTANT 12.5W POWER DISSIPATION IS OBTAINED (JUNCTION TEMPERATURE RISE 12.75°C).
- NOTE 3** ♦ ZENER IMPEDANCE IS DERIVED FROM 60HZ AC VOLTAGE WHICH RESULTS WHEN AC CURRENT RMS VALUE EQUAL TO 10% OF D.C ZENER CURRENT IS SUPERIMPOSED ON I_{ZT} .
♦ ZENER IMPEDANCE IS MEASURED AT 2 POINTS ON THE REVERSE BREAKDOWN CURVE.
- NOTE 4** ♦ I_{ZM} VALUES DERIVED FOR A $\pm 5\%$ V_Z TOL.
♦ I_{ZM} IS THE VALUE OF ZENER CURRENT AT WHICH POINT 50W POWER DISSIPATION RESULTS.



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TO-3 - CONTINUED

FIGURE 1A - TO-3 DERATING CURVE

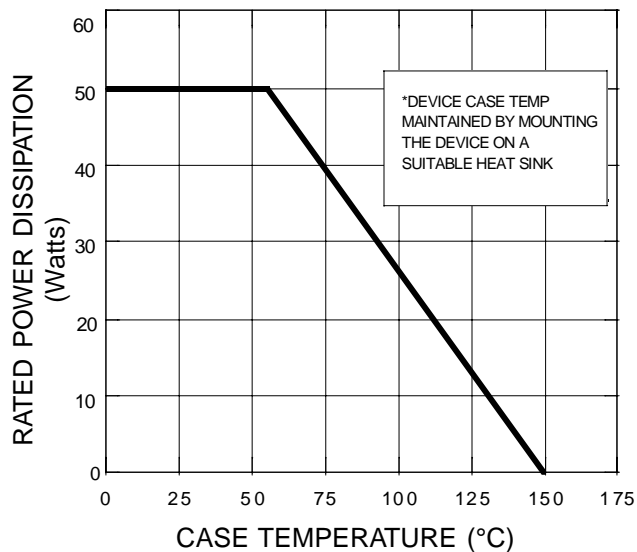
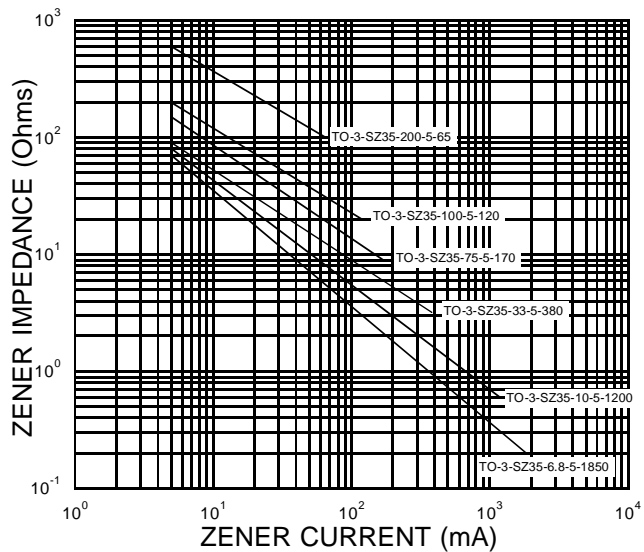
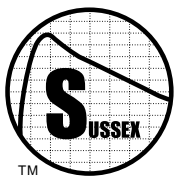


FIGURE 2A - TO-3 ZENER IMPEDANCE VS. ZENER CURRENT



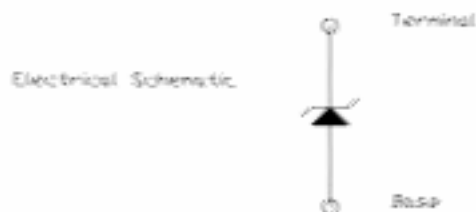
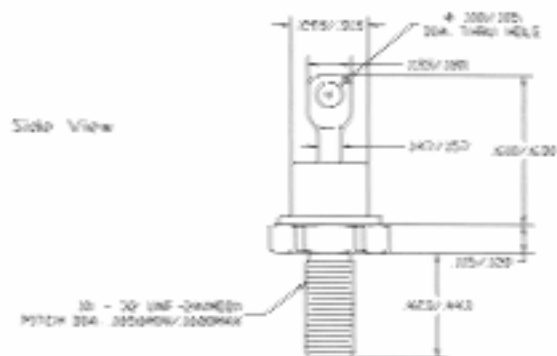
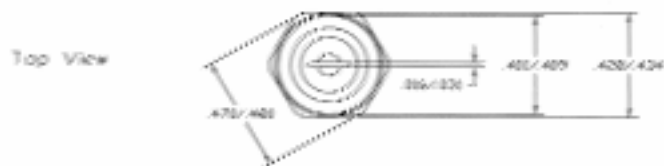


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**10 WATT MAX
DO - 4 ZENERS**



All Dimensions In Inches

GLASS PASSIVATED DO-4 ZENER

ZENER VOLTAGES - 6.8 TO 200 VOLTS

10 WATT MAXIMUM POWER DISSIPATION

DO - 4 DEVICE SPECIFICATIONS

- ◆ Hermetically Sealed Glass to Metal Package
- ◆ Designed for Military and Industrial Use
- ◆ Each Device Individually Inspected
- ◆ Standard Polarity Anode to Base
- ◆ Available Tolerances: $\pm 5\%$, $\pm 10\%$, $\pm 20\%$
- ◆ 7/16" Hexagon Stud with 10-32 Threads
- ◆ Operating and Storage Temperature: -65°C to $+150^{\circ}\text{C}$
- ◆ Forward Voltage @ 2.0 A: 1.5 V
- ◆ Copper Terminals Provide Secure Connections and Good Conductivity

DO4 CUSTOM ORDERING SPECIFIER

DIE SPECIFICATIONS

DO4 - SZ 16 - 8.2 - 5 - 305 -

DEVICE
CODE

ZENER DIE

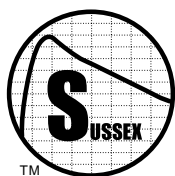
NOMINAL
ZENER VOLTAGE

ZENER TEST
CURRENT

AVAILABLE SIZES	
CODE	DIE SIZE
16*	.115sq
8	.100sq
5	.095sq
*10W DEVICE MUST USE .115sq DIE	

TOLERANCE	
CODE	TOLERANCE
5	$\pm 5\%$
10	$\pm 10\%$
20	$\pm 20\%$

- ◆ BLANK- INDICATES STANDARD POLARITY ANODE TO BASE
- ◆ R- INDICATES REVERSE POLARITY CATHODE TO BASE



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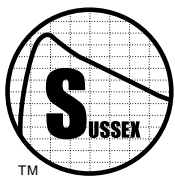
DO-4 - CONTINUED

TABLE 1A - STANDARD DEVICE ELECTRICAL SPECIFICATIONS (NOTE 1)

JEDEC PART NUMBER	SUSSEX PART NUMBER	NOMINAL ZENER VOLTAGE $V_Z @ I_{ZT}$ (NOTE 2) VOLTS	ZENER TEST CURRENT (I_{ZT}) mA	MAX. ZENER IMPEDANCE (NOTE 3)		MAX. DC ZENER CURRENT $(I_{ZM}) @ 75^{\circ}\text{C}$ STUD TEMP. (NOTE 4) mA	TYPICAL ZENER VOLTAGE TEMP. COEFF. %/°C	MAXIMUM LEAKAGE CURRENT $I_R @ V_R$	
				$Z_{ZT} @ I_{ZT}$ OHMS	$Z_{ZK} @ 1\text{mA}$ (I_{ZK}) OHMS			μA	V
1N2970B	DO4-SZ16-6.8-5-370	6.8	370	1.2	500	1320	0.04	150	5.2
1N2971B	DO4-SZ16-7.5-5-335	7.5	335	1.3	250	1180	0.045	100	5.7
1N2972B	DO4-SZ16-8.2-5-305	8.2	305	1.5	250	1040	0.048	50	6.2
1N2973B	DO4-SZ16-9.1-5-275	9.1	275	2	250	960	0.051	25	6.9
1N2974B	DO4-SZ16-10-5-250	10	250	3	250	860	0.055	25	7.6
1N2975B	DO4-SZ16-11-5-230	11	230	3	250	780	0.06	10	8.4
1N2976B	DO4-SZ16-12-5-210	12	210	3	250	720	0.065	10	9.1
1N2977B	DO4-SZ16-13-5-190	13	190	3	250	660	0.065	10	9.9
1N2978B	DO4-SZ16-14-5-180	14	180	3	250	600	0.07	10	10.5
1N2979B	DO4-SZ16-15-5-170	15	170	3	250	560	0.07	10	11.4
1N2980B	DO4-SZ16-16-5-155	16	155	4	250	530	0.07	10	12.2
1N2981B	DO4-SZ16-17-5-145	17	145	4	250	500	0.075	10	13
1N2982B	DO4-SZ16-18-5-140	18	140	4	250	460	0.075	10	13.7
1N2983B	DO4-SZ16-19-5-130	19	130	4	250	440	0.075	10	14
1N2984B	DO4-SZ16-20-5-125	20	125	4	250	420	0.075	10	15.2
1N2985B	DO4-SZ16-22-5-115	22	115	5	250	380	0.08	10	16.7
1N2986B	DO4-SZ16-24-5-105	24	105	5	250	350	0.08	10	18.2
1N2987B	DO4-SZ16-25-5-100	25	100	6	250	310	0.08	10	18.2
1N2988B	DO4-SZ16-27-5-95	27	95	7	250	300	0.085	10	20.6
1N2989B	DO4-SZ16-30-5-85	30	85	8	300	280	0.085	10	22.8
1N2990B	DO4-SZ16-33-5-75	33	5	9	300	260	0.085	10	25.1
1N2991B	DO4-SZ16-36-5-70	36	70	10	300	230	0.085	10	27.4
1N2992B	DO4-SZ16-39-5-65	39	65	11	300	210	0.09	10	29.7
1N2993B	DO4-SZ16-43-5-60	43	60	12	400	195	0.09	10	32.7
1N2994B	DO4-SZ16-45-5-55	45	55	13	400	185	0.09	10	33
1N2995B	DO4-SZ16-47-5-55	47	55	14	400	175	0.09	10	35.8
1N2996B	DO4-SZ16-50-5-50	50	50	15	500	165	0.09	10	36
1N2997B	DO4-SZ16-51-5-50	51	50	15	500	160	0.09	10	38.8
1N2998B	DO4-SZ16-52-5-50	52	50	15	500	160	0.09	10	39
1N2999B	DO4-SZ16-56-5-45	56	45	16	500	150	0.09	10	42.6
1N3000B	DO4-SZ16-62-5-40	62	40	17	600	130	0.09	10	47.1
1N3001B	DO4-SZ16-68-5-37	68	37	18	600	120	0.09	10	51.7
1N3002B	DO4-SZ16-75-5-33	75	33	22	600	110	0.09	10	56
1N3003B	DO4-SZ16-82-5-30	82	30	25	700	100	0.09	10	62.2
1N3004B	DO4-SZ16-91-5-28	91	28	35	800	85	0.09	10	69.2
1N3005B	DO4-SZ16-100-5-25	100	25	40	900	80	0.09	10	76
1N3006B	DO4-SZ16-105-5-25	105	25	45	1000	75	0.095	10	76
1N3007B	DO4-SZ16-110-5-23	110	23	55	1100	72	0.095	10	83.6
1N3008B	DO4-SZ16-120-5-20	120	20	75	1200	68	0.095	10	91.2
1N3009B	DO4-SZ16-130-5-19	130	19	100	1300	62	0.095	10	98.8
1N3010B	DO4-SZ16-140-5-18	140	18	125	1400	58	0.095	10	100
1N3011B	DO4-SZ16-150-5-17	150	17	175	1500	54	0.095	10	114
1N3012B	DO4-SZ16-160-5-16	160	16	200	1600	50	0.095	10	121.6
1N3013B	DO4-SZ16-175-5-14	175	14	250	1750	46	0.095	10	135
1N3014B	DO4-SZ16-180-5-14	180	14	260	1850	45	0.095	10	136.8
1N3015B	DO4-SZ16-200-5-12	200	12	300	2000	40	0.1	10	152

NOTES

- NOTE 1** ♦ ELECTRICAL CHARACTERISTICS MEASURED AT 25°C UNLESS OTHERWISE STATED.
♦ TABLE DEMONSTRATES DEVICE CHARACTERISTICS FOR A 10W DEVICE (SZ16 CHIP).
- NOTE 2** ♦ V_Z MEASURED AT JUNCTION AND CASE TEMPERATURE BOTH AT 25°C.
♦ I_{ZT} IS SELECTED SO THAT A CONSTANT 12.5W POWER DISSIPATION IS OBTAINED (JUNCTION TEMPERATURE RISE 12.75°C).
- NOTE 3** ♦ ZENER IMPEDANCE IS DERIVED FROM 60HZ AC VOLTAGE WHICH RESULTS WHEN AC CURRENT RMS VALUE EQUAL TO 10% OF D.C ZENER CURRENT IS SUPERIMPOSED ON I_Z .
♦ ZENER IMPEDANCE IS MEASURED AT 2 POINTS ON THE REVERSE BREAKDOWN CURVE.
- NOTE 4** ♦ I_{ZM} VALUES DERIVED FOR A $\pm 5\%$ V_Z TOL.
♦ I_{ZM} IS THE VALUE OF ZENER CURRENT AT WHICH POINT 10W POWER DISSIPATION RESULTS.



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DO-4 - CONTINUED

FIGURE 3A - DO-4 DERATING CURVE

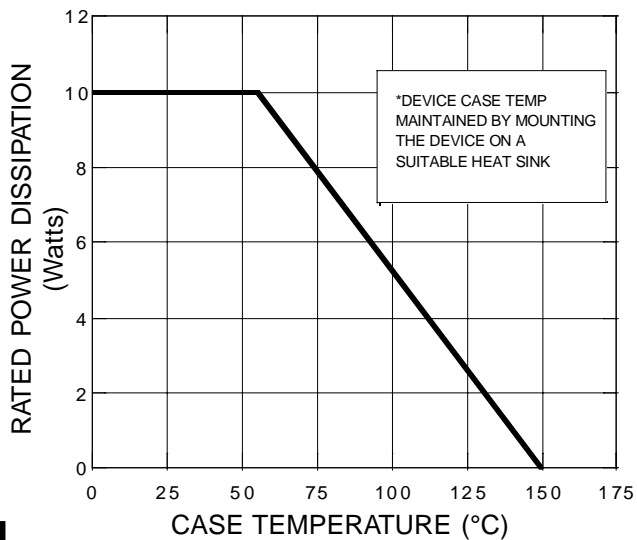
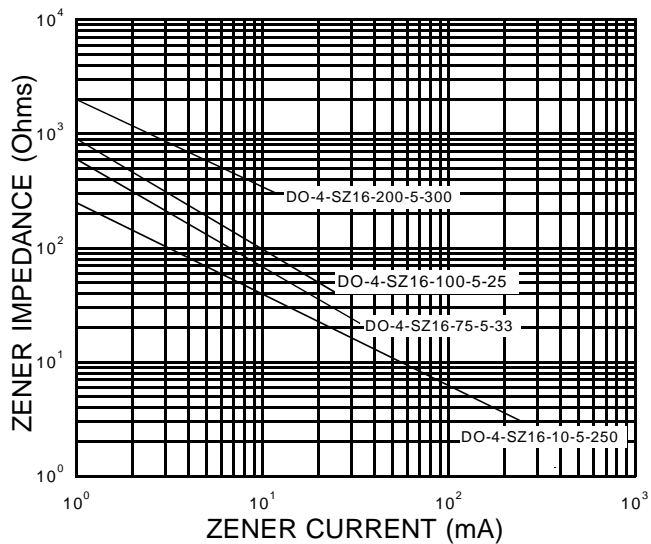


FIGURE 4A - DO-4 ZENER IMPEDANCE VS. ZENER CURRENT



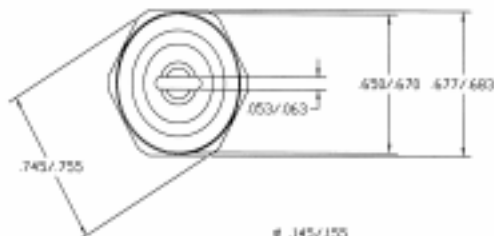


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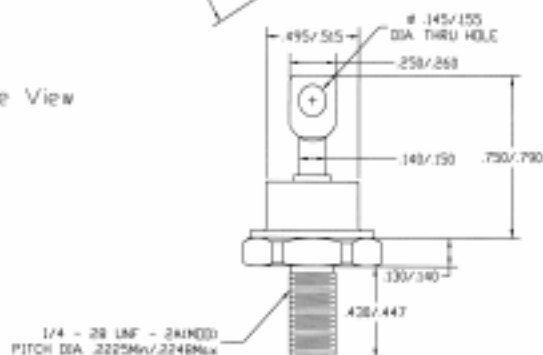
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50 WATT MAX
DO - 5 ZENERS

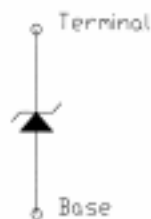
Top View



Side View



Electrical Schematic



All Dimensions In Inches

GLASS PASSIVATED DO-5 ZENER

ZENER VOLTAGES - 6.8 TO 200 VOLTS

50 WATT MAXIMUM POWER DISSIPATION

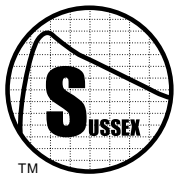
DO - 5
DEVICE SPECIFICATIONS

- ◆ Hermetically Sealed Glass to Metal Package
- ◆ Designed for Military and Industrial Use
- ◆ Each Device Individually Inspected
- ◆ Standard Polarity Anode to Base
- ◆ Available Tolerances: $\pm 5\%$, $\pm 10\%$, $\pm 20\%$
- ◆ 11/16" Hexagon Stud with 1/4-28 Threads
- ◆ Operating and Storage Temperature: -65°C to $+150^{\circ}\text{C}$
- ◆ Forward Voltage @ 10 A: 1.5V
- ◆ Copper Terminals Provide Secure Connections and Good Conductivity

DO5 CUSTOM ORDERING SPECIFIER

DIE SPECIFICATIONS

DO5 -	SZ	35 -	8.2 -	5 -	305 -
DEVICE CODE	ZENER DIE	NOMINAL ZENER VOLTAGE	ZENER TEST CURRENT		
AVAILABLE SIZES		TOLERANCE		◆ BLANK- INDICATES STANDARD POLARITY ANODE TO BASE ◆ R- INDICATES REVERSE POLARITY CATHODE TO BASE	
CODE	DIE SIZE	CODE	TOLERANCE		
35*	.200sq	5	$\pm 5\%$		
30	.180sq	10	$\pm 10\%$		
25	.165sq	20	$\pm 20\%$		
*50W DEVICE MUST USE .200sq DIE					



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DO-5 - CONTINUED

TABLE 1A - STANDARD DEVICE ELECTRICAL SPECIFICATIONS (NOTE 1)

JEDEC PART NUMBER	SUSSEX PART NUMBER	NOMINAL ZENER VOLTAGE $V_Z @ I_{ZT}$ (NOTE 2) VOLTS	ZENER TEST CURRENT (I_{ZT}) mA	MAX. ZENER IMPEDANCE (NOTE 3)		MAX. DC ZENER CURRENT $(I_{ZM}) @ 75^{\circ}\text{C}$ STUD TEMP. (NOTE 4) mA	TYPICAL ZENER VOLTAGE TEMP. COEFF. % / $^{\circ}\text{C}$	MAXIMUM LEAKAGE CURRENT $I_R @ V_R$	
				$Z_{ZT} @ I_{ZT}$ OHMS	$Z_{ZK} @$ 5mA (I_{ZK}) OHMS			μA	V
1N3305B	DO5-SZ35-6.8-5-1850	6.8	1850	0.2	70	6600	.040	150	4.5
1N3306B	DO5-SZ35-7.5-5-1700	7.5	1700	0.3	70	5900	.045	100	5.0
1N3307B	DO5-SZ35-8.2-5-1500	8.2	1500	0.4	70	5200	.048	50	5.4
1N3308B	DO5-SZ35-9.1-5-1370	9.1	1370	0.5	70	4800	.050	25	6.1
1N3309B	DO5-SZ35-10.5-5-1200	10.0	1200	0.6	80	4300	.055	25	6.7
1N3310B	DO5-SZ35-11.5-5-1100	11.0	1100	0.8	80	3900	.060	10	8.4
1N3311B	DO5-SZ35-12.5-5-1000	12.0	1000	1.0	80	3800	.065	10	9.1
1N3312B	DO5-SZ35-13.5-5-960	13.0	960	1.1	80	3300	.065	10	9.9
1N3313B	DO5-SZ35-14.5-5-890	14.0	890	1.2	80	3000	.070	10	11.4
1N3314B	DO5-SZ35-15.5-5-830	15.0	830	1.4	80	2800	.070	10	11.4
1N3315B	DO5-SZ35-16.5-5-780	16.0	780	1.6	80	2650	.070	10	12.2
1N3316B	DO5-SZ35-17.5-5-740	17.0	740	1.8	80	2500	.075	10	13.0
1N3317B	DO5-SZ35-18.5-5-700	18.0	700	2.0	80	2300	.075	10	13.7
1N3318B	DO5-SZ35-19.5-5-660	19.0	660	2.2	80	2200	.075	10	13.7
1N3319B	DO5-SZ35-20.5-5-630	20.0	630	2.4	80	2100	.075	10	15.2
1N3320B	DO5-SZ35-22.5-5-570	22.0	570	2.5	80	1900	.080	10	16.7
1N3321B	DO5-SZ35-24.5-5-520	24.0	520	2.6	80	1750	.080	10	18.2
1N3322B	DO5-SZ35-25.5-5-500	25.0	500	2.7	90	1550	.080	10	18.2
1N3323B	DO5-SZ35-27.5-5-460	27.0	460	2.8	90	1500	.085	10	20.6
1N3324B	DO5-SZ35-30.5-5-420	30.0	420	3.0	90	1400	.085	10	22.8
1N3325B	DO5-SZ35-33.5-5-380	33.0	380	3.2	90	1300	.085	10	25.1
1N3326B	DO5-SZ35-36.5-5-350	36.0	350	3.5	90	1150	.085	10	27.4
1N3327B	DO5-SZ35-39.5-5-320	39.0	320	4.0	90	1050	.090	10	29.7
1N3328B	DO5-SZ35-43.5-5-290	43.0	290	4.5	90	975	.090	10	32.7
1N3329B	DO5-SZ35-45.5-5-280	45.0	280	4.5	100	930	.090	10	32.7
1N3330B	DO5-SZ35-47.5-5-270	47.0	270	5.0	100	880	.090	10	35.8
1N3331B	DO5-SZ35-50.5-5-250	50.0	250	5.0	100	830	.090	10	38.0
1N3332B	DO5-SZ35-51.5-5-245	51.0	245	5.2	100	810	.090	10	38.8
1N3333B	DO5-SZ35-52.5-5-240	52.0	240	5.5	100	790	.090	10	42.6
1N3334B	DO5-SZ35-56.5-5-220	56.0	220	6.0	110	740	.090	10	42.6
1N3335B	DO5-SZ35-62.5-5-200	62.0	200	7.0	120	660	.090	10	47.1
1N3336B	DO5-SZ35-68.5-5-180	68.0	180	8.0	140	600	.090	10	51.7
1N3337B	DO5-SZ35-75.5-5-170	75.0	170	9.0	150	540	.090	10	56.0
1N3338B	DO5-SZ35-82.5-5-150	82.0	150	11	160	490	.090	10	62.2
1N3339B	DO5-SZ35-91.5-5-140	91.0	140	15	180	420	.090	10	69.2
1N3340B	DO5-SZ35-100.5-5-120	100.0	120	20	200	400	.090	10	76.0
1N3341B	DO5-SZ35-105.5-5-120	105.0	120	25	210	380	.095	10	83.0
1N3342B	DO5-SZ35-110.5-5-110	110.0	110	30	220	365	.095	10	83.0
1N3343B	DO5-SZ35-120.5-5-100	120.0	100	40	240	335	.095	10	91.2
1N3344B	DO5-SZ35-130.5-5-95	130.0	95	50	275	310	.095	10	99.8
1N3345B	DO5-SZ35-140.5-5-90	140.0	90	60	325	290	.095	10	114.0
1N3346B	DO5-SZ35-150.5-5-85	150.0	85	75	400	270	.095	10	114.0
1N3347B	DO5-SZ35-160.5-5-80	160.0	80	80	450	250	.095	10	121.6
1N3348B	DO5-SZ35-175.5-5-70	175.0	70	85	500	230	.095	10	121.6
1N3349B	DO5-SZ35-180.5-5-68	180.0	68	90	525	220	.095	10	136.8
1N3350B	DO5-SZ35-200.5-5-65	200.0	65	100	600	200	.100	10	152.0

NOTES

- NOTE 1** ♦ ELECTRICAL CHARACTERISTICS MEASURED AT 25°C UNLESS OTHERWISE STATED.
♦ TABLE DEMONSTRATES DEVICE CHARACTERISTICS FOR A 50W DEVICE (SZ35 CHIP).
- NOTE 2** ♦ V_Z MEASURED AT JUNCTION AND CASE TEMPERATURE BOTH AT 25°C.
♦ I_{ZT} IS SELECTED SO THAT A CONSTANT 12.5W POWER DISSIPATION IS OBTAINED (JUNCTION TEMPERATURE RISE 12.75°C).
- NOTE 3** ♦ ZENER IMPEDANCE IS DERIVED FROM 60HZ AC VOLTAGE WHICH RESULTS WHEN AC CURRENT RMS VALUE EQUAL TO 10% OF D.C ZENER CURRENT IS SUPERIMPOSED ON I_{ZT} .
♦ ZENER IMPEDANCE IS MEASURED AT 2 POINTS ON THE REVERSE BREAKDOWN CURVE.
- NOTE 4** ♦ I_{ZM} VALUES DERIVED FOR A $\pm 5\%$ V_Z TOL.
♦ I_{ZM} IS THE VALUE OF ZENER CURRENT AT WHICH POINT 50W POWER DISSIPATION RESULTS.



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DO-5 - CONTINUED

FIGURE 5A - DO-5 DERATING CURVE

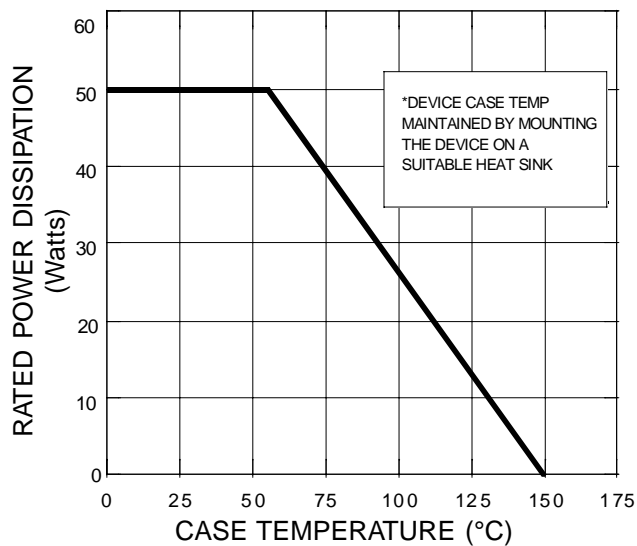


FIGURE 6A - DO-5 ZENER IMPEDANCE VS. ZENER CURRENT

