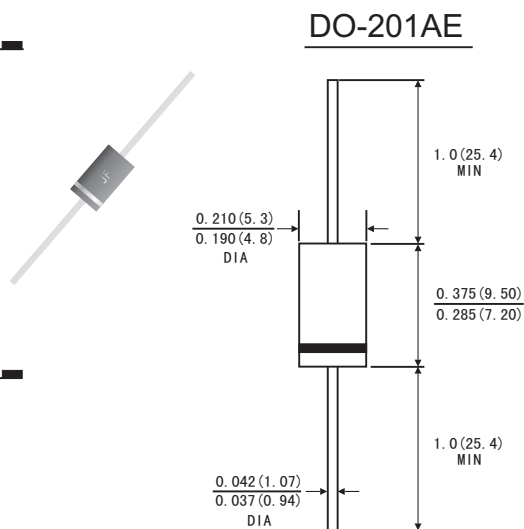


### FEATURES

- Low leakage, low zener impedance at low current
- Maximum power dissipation of 5W is ideally suited for stabilized power supply, etc.
- High temperature soldering guaranteed: 260°C/10 seconds at terminals
- Standard zener voltage tolerance available is  $\pm 20\%$ . Suffix "A" indicates  $\pm 10\%$  tolerance. Suffix "B" indicates  $\pm 5\%$  tolerance.

### MECHANICAL DATA

- Case: DO-201AE molded plastic
- Terminals: Plated axial leads, solderable per MIL-STD-750, method 2026
- Polarity: Color band denotes cathode end



Dimensions in inches and (millimeters)

### ABSOLUTE MAXIMUM RATINGS(LIMITING VALUES) ( $T_A=25^\circ\text{C}$ )

	<i>Symbols</i>	<i>Value</i>	<i>Units</i>
Zener current see table "Characteristics"			
Power dissipation	$P_{tot}$	5	W
Junction temperature	$T_J$	-55 to +150	$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-55 to +150	$^\circ\text{C}$

1) Valid provided that a distance of 8mm from case is kept at ambient temperature

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

	<i>Symbols</i>	<i>Min</i>	<i>Typ</i>	<i>Max</i>	<i>Units</i>
Thermal resistance junction to ambient	$R_{\theta JA}$			100	$^\circ\text{C/W}$
Forward voltage at $I_F=200\text{mA}$	$V_F$			1.2	V

# 1N5342... PLASTIC PACKAGE ZENER DIODES

Electrical characteristics (TA=25°C)								
Type	Nominal Zener voltage		Maximum Zener impedance			Maximum reverse leakage current		Max regulator zener current
	Vz@IzT	IzT	ZzT@IzT	Zzx@Izx	Izx	IR@VR	VR	IzM@50°C
	V	mA	Ω	Ω	mA	uA	V	mA
1N5342	6.8	175	1.0	200	1.0	10	4.9	700
1N5343	7.5	175	1.5	200	1.0	10	5.4	630
1N5344	8.2	150	1.5	200	1.0	10	5.9	580
1N5345	8.7	125	2.0	200	1.0	10	6.3	545
1N5346	9.1	125	2.0	150	1.0	7.5	6.6	520
1N5347	10	100	2.0	125	1.0	5.0	7.2	475
1N5348	11	100	2.5	125	1.0	5.0	8.0	430
1N5349	12	100	2.5	125	1.0	2.0	8.6	395
1N5350	13	75	2.5	100	1.0	1.0	9.4	365
1N5351	14	75	2.5	75	1.0	1.0	10.1	340
1N5352	15	70	2.5	75	1.0	1.0	10.8	315
1N5353	16	65	2.5	75	1.0	1.0	11.5	295
1N5354	17	65	2.5	75	1.0	0.5	12.2	280
1N5355	18	65	2.5	75	1.0	0.5	13.0	265
1N5356	19	50	3.0	75	1.0	0.5	13.7	250
1N5357	20	50	3.0	75	1.0	0.5	14.4	237
1N5358	22	50	3.5	75	1.0	0.5	15.8	216
1N5359	24	50	3.5	100	1.0	0.5	17.3	198
1N5360	25	50	4.0	110	1.0	0.5	18.0	190
1N5361	27	50	5.0	120	1.0	0.5	19.4	176
1N5362	28	50	6.0	130	1.0	0.5	20.1	170
1N5363	30	40	8.0	140	1.0	0.5	21.6	158
1N5364	33	40	10	150	1.0	0.5	23.8	144
1N5365	36	30	11	160	1.0	0.5	25.9	132
1N5366	39	30	14	170	1.0	0.5	28.1	122
1N5367	43	30	20	190	1.0	0.5	31.0	110
1N5368	47	25	25	210	1.0	0.5	33.8	100
1N5369	51	25	27	230	1.0	0.5	36.7	93.0
1N5370	56	20	35	280	1.0	0.5	40.3	86.0
1N5371	60	20	40	350	1.0	0.5	43.0	79.0
1N5372	62	20	42	400	1.0	0.5	44.6	76.0
1N5373	68	20	44	500	1.0	0.5	49.0	70.0
1N5374	75	20	45	620	1.0	0.5	54.0	63.0
1N5375	82	15	65	720	1.0	0.5	59.0	58.0
1N5376	87	15	75	760	1.0	0.5	63.0	54.5
1N5377	91	15	75	760	1.0	0.5	65.0	52.5
1N5378	100	12	90	800	1.0	0.5	72.0	47.5
1N5379	110	12	125	1000	1.0	0.5	79.2	43.0
1N5380	120	10	170	1150	1.0	0.5	86.4	39.5
1N5381	130	10	190	1250	1.0	0.5	93.2	36.6
1N5382	140	8	230	1500	1.0	0.5	101	34.0
1N5383	150	8	330	1500	1.0	0.5	108	31.6
1N5384	160	8	350	1650	1.0	0.5	115	29.4
1N5385	170	8	380	1750	1.0	0.5	122	28.0
1N5386	180	5	430	1750	1.0	0.5	130	26.4
1N5387	190	5	450	1850	1.0	0.5	137	25.0
1N5388	200	5	480	1850	1.0	0.5	144	23.6

# 1N5342... PLASTIC PACKAGE ZENER DIODES

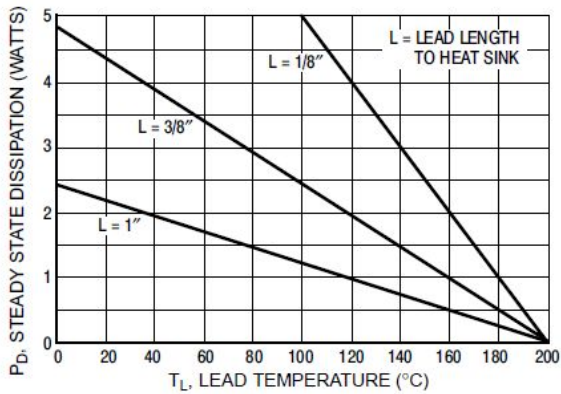


Figure 1. Power Temperature Derating Curve

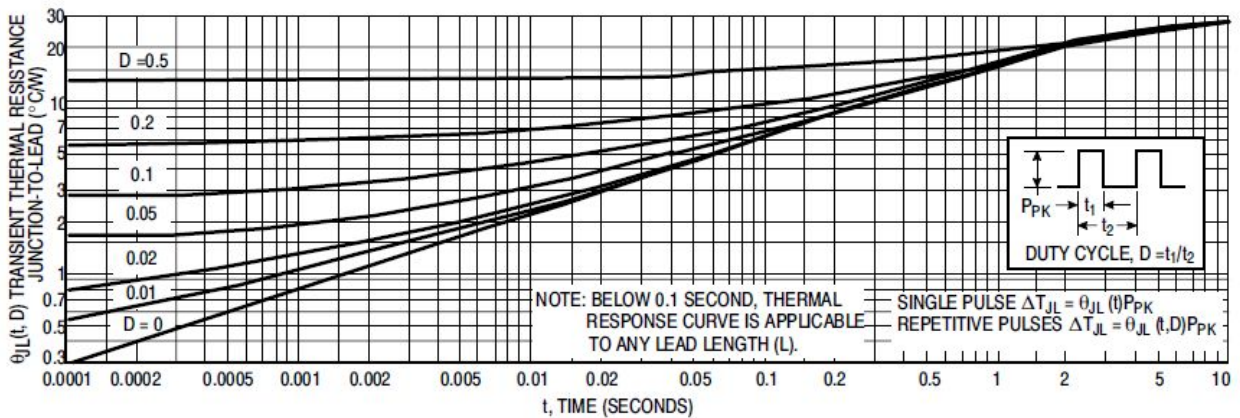


Figure 2. Typical Thermal Response L, Lead Length = 3/8 Inch

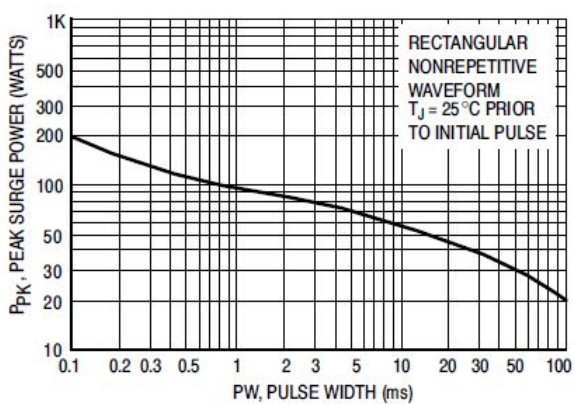


Figure 3. Maximum Surge Power

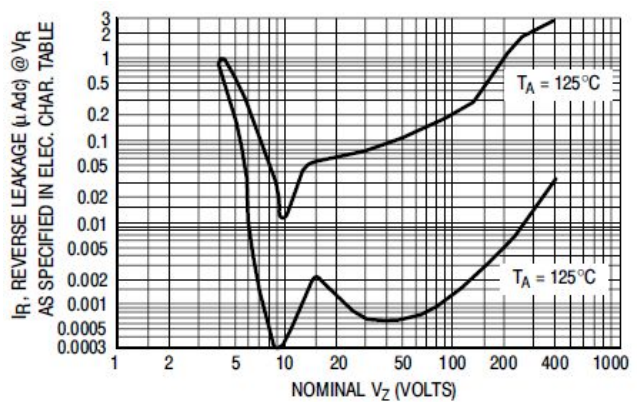


Figure 4. Typical Reverse Leakage