

1N4678 SERIES

AXIAL LEAD ZENER DIODES

VOLTAGE 1.8 to 43 Volt **POWER** 500mWatt

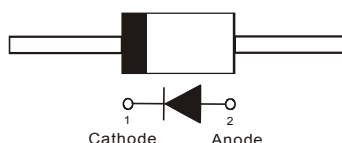
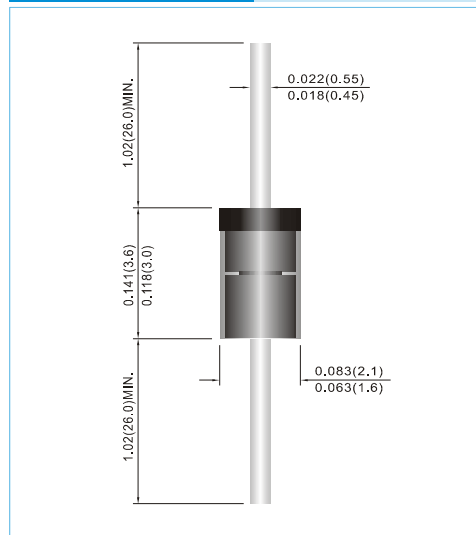
DO-35 Unit : inch(mm)

FEATURES

- Planar Die construction
- 500mW Power Dissipation
- Ideally Suited for Automated Assembly Processes
- Lead free in compliance with EU RoHS 2011/65/EU directive

MECHANICAL DATA

- Case: Molded Glass DO-35
- Terminals: Solderable per MIL-STD-750, Method 2026
- Approx. Weight: 0.00465 ounces, 0.131 grams
- Packing information
 - B - 2K per Bulk box
 - T/R - 10K per 15" plastic Reel
 - T/B - 5K per horiz. tape & Ammo box



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS (T_A=25°C unless otherwise noted)

Rating	Symbol	Value	Units
Power Dissipation at T _A = 25 °C	P _{TOT}	500	mW
Maximum Forward Voltage at I _F =100mA	V _F	1	V
Maximum Thermal Resistance Junction to Ambient Air (Notes 1)	R _{θJA}	300	°C / W
Operating Junction Temperature Range	T _J	-55 to +175	°C
Storage Temperature Range	T _{STG}	-55 to +175	°C

NOTES :

1. Valid provided that leads at a distance of 10mm from case are kept at ambient temperature.

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Part Number	Nominal Zener Voltage			Max. Zener Impedance		Max. Reverse Leakage Current		Marking Code
	V _Z @ I _{ZT}			Z _{zT} @ I _{zT}		I _R @ V _R		
	Nom.V	Min.V	Max.V	Ω	mA	μA	V	
1N4678	1.8	1.710	1.890	-	0.05	7.50	1.0	1N4678
1N4679	2.0	1.900	2.100	-	0.05	5.00	1.0	1N4679
1N4680	2.2	2.090	2.310	-	0.05	4.00	1.0	1N4680
1N4681	2.4	2.280	2.520	-	0.05	2.00	1.0	1N4681
1N4682	2.7	2.565	2.835	-	0.05	1.00	1.0	1N4682
1N4683	3.0	2.850	3.150	-	0.05	0.80	1.0	1N4683
1N4684	3.3	3.135	3.465	-	0.05	7.50	1.5	1N4684
1N4685	3.6	3.420	3.780	-	0.05	7.50	2.0	1N4685
1N4686	3.9	3.705	4.095	-	0.05	5.00	2.0	1N4686
1N4687	4.3	4.085	4.515	-	0.05	4.00	2.0	1N4687
1N4688	4.7	4.465	4.935	-	0.05	10	3.0	1N4688
1N4689	5.1	4.845	5.355	-	0.05	10	3.0	1N4689
1N4690	5.6	5.320	5.880	-	0.05	10	4.0	1N4690
1N4691	6.2	5.890	6.510	-	0.05	10	5.0	1N4691
1N4692	6.8	6.460	7.140	-	0.05	10	5.1	1N4692
1N4693	7.5	7.125	7.875	-	0.05	10	5.7	1N4693
1N4694	8.2	7.790	8.610	-	0.05	1.0	6.2	1N4694
1N4695	8.7	8.265	9.135	-	0.05	1.0	6.6	1N4695
1N4696	9.1	8.645	9.555	-	0.05	1.0	6.9	1N4696
1N4697	10.0	9.500	10.50	-	0.05	1.0	7.6	1N4697
1N4698	11.0	10.45	11.55	-	0.05	0.05	8.4	1N4698
1N4699	12.0	11.40	12.60	-	0.05	0.05	9.1	1N4699
1N4700	13.0	12.35	13.65	-	0.05	0.05	9.8	1N4700
1N4701	14.0	13.30	14.70	-	0.05	0.05	10.6	1N4701
1N4702	15.0	14.25	15.75	-	0.05	0.05	11.4	1N4702
1N4703	16.0	15.20	16.80	-	0.05	0.05	12.1	1N4703
1N4704	17.0	16.15	17.85	-	0.05	0.05	12.9	1N4704
1N4705	18.0	17.10	18.90	-	0.05	0.05	13.6	1N4705
1N4706	19.0	18.05	19.95	-	0.05	0.05	14.4	1N4706
1N4707	20.0	19.00	21.00	-	0.05	0.01	15.2	1N4707
1N4708	22.0	20.90	23.10	-	0.05	0.01	16.7	1N4708
1N4709	24.0	22.80	25.20	-	0.05	0.01	18.2	1N4709
1N4710	25.0	23.75	26.25	-	0.05	0.01	19.0	1N4710
1N4711	27.0	25.65	28.35	-	0.05	0.01	20.4	1N4711
1N4712	28.0	26.60	29.40	-	0.05	0.01	21.2	1N4712
1N4713	30.0	28.50	31.50	-	0.05	0.01	22.8	1N4713
1N4714	33.0	31.35	34.65	-	0.05	0.01	25.0	1N4714
1N4715	36.0	34.20	37.80	-	0.05	0.01	27.3	1N4715
1N4716	39.0	37.05	40.95	-	0.05	0.01	29.6	1N4716
1N4717	43.0	40.85	45.15	-	0.05	0.01	32.6	1N4717

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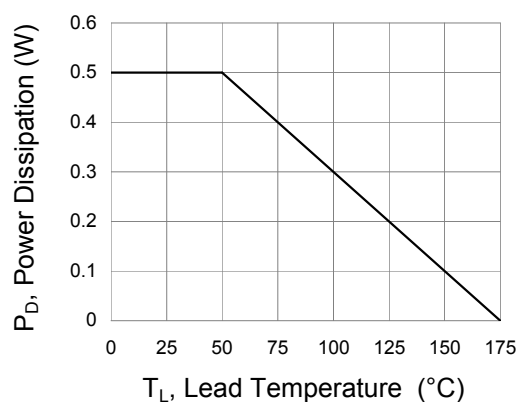


Fig.1 Power Derating Curve

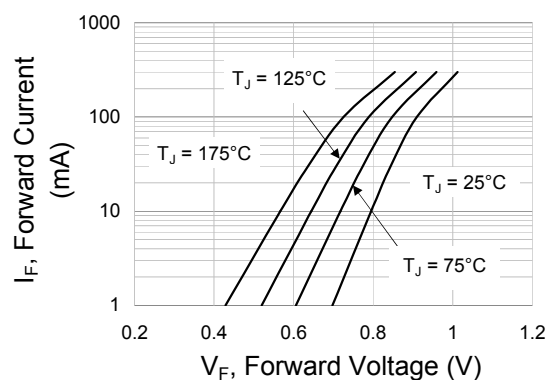


Fig.2 Typical Forward Characteristics

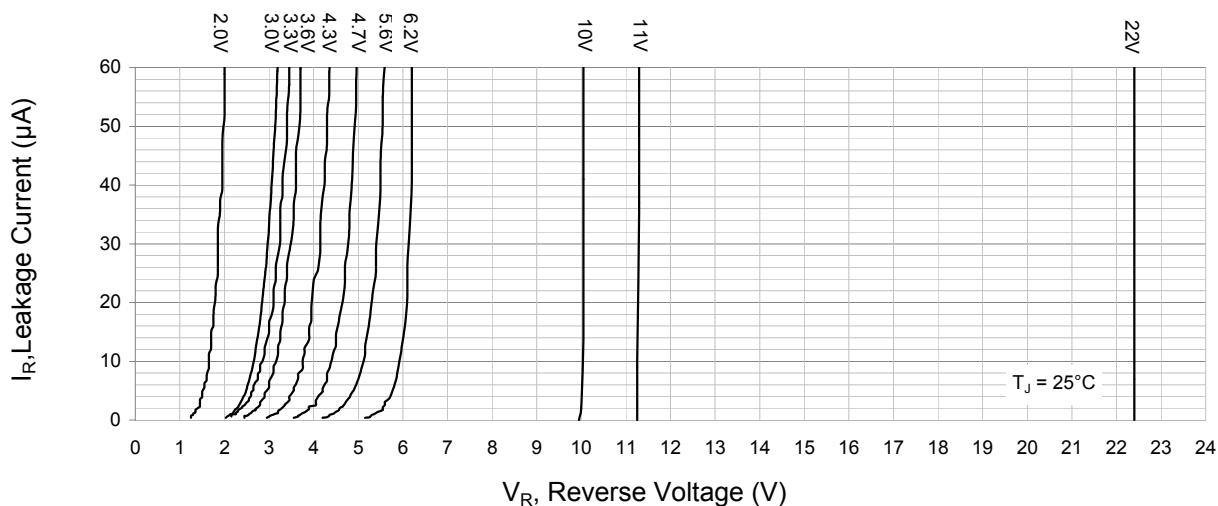


Fig.3 Typical Reverse Characteristics

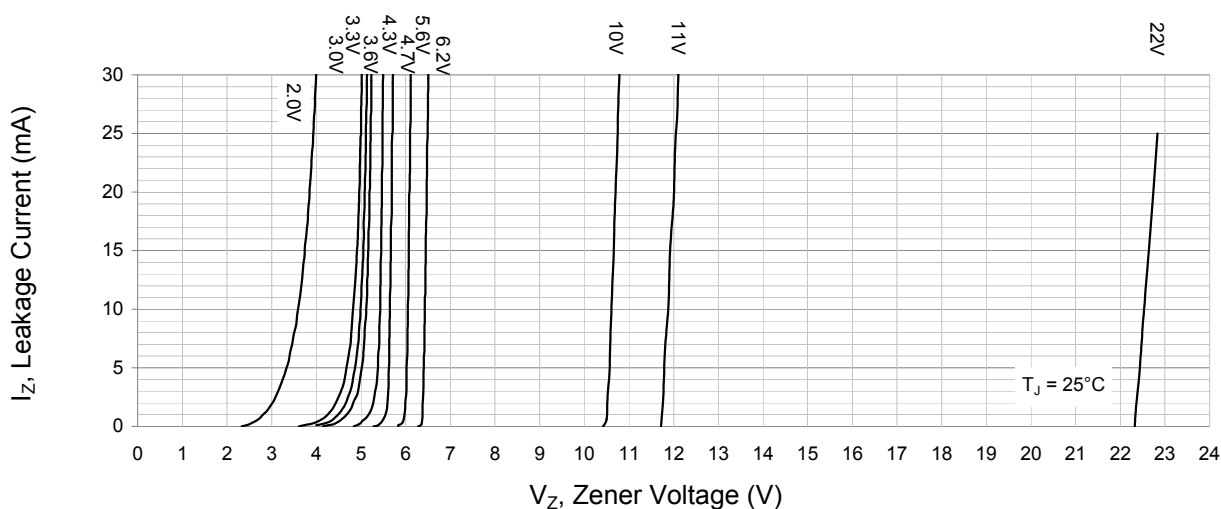


Fig.4 Typical Zener Characteristics

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Part No_packing code_Version

1N4678_AX_10001

1N4678_AY_10001

1N4678_R2_10001

1N4678_B0_10001

For example :

RB500V-40_R2_00001



Packing Code XX				Version Code XXXXX		
Packing type	1 st Code	Packing size code	2 nd Code	HF or RoHS	1 st Code	2 nd ~5 th Code
Tape and Ammunition Box (T/B)	A	N/A	0	HF	0	serial number
Tape and Reel (T/R)	R	7"	1	RoHS	1	serial number
Bulk Packing (B/P)	B	13"	2			
Tube Packing (T/P)	T	26mm	X			
Tape and Reel (Right Oriented) (TRR)	S	52mm	Y			
Tape and Reel (Left Oriented) (TRL)	L	PANASERT T/B CATHODE UP (PBCU)	U			
FORMING	F	PANASERT T/B CATHODE DOWN (PBCD)	D			

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