

DO-41 Glass Body DO-41 Plastic Body
For Plastic Body (suffix-PP)
Dimensions in inches and millimeters

■ FEATURES

- High reliability
- Very sharp revers characteristic
- Low reverse current level
- Silicon planar power Zener diodes
- Standard Zener voltage tolerance $\pm 5\%$

■ MECHANICAL DATA

- Glass or Plastic body
- Voltage stabilization
- Zener voltage: 3.3 to 100 volts
- Peak pulse power 1,000mW

■ MAXIMUM RATINGS (T_a=25°C Unless otherwise specified)

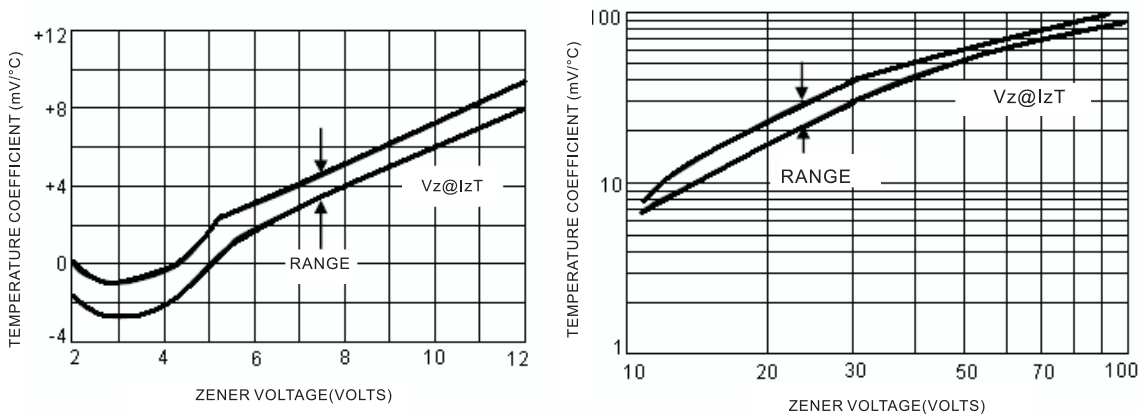
Parameters	Symbol	Value	Units
Power Dissipation	P _D	1000	mW
Junction Temperature	T _J	200	°C
Storage Temperature Range	T _{STG}	-55 to +175	°C
Thermal resistance junction ambient(Note 1)	R _{θJA}	0.3	K/mW
Forward voltage at I _F =200mA	V _F	1.1	V

Note 1: Valid provided that leads at a distance of 8mm from case are kept at ambient temperature

■ ELECTRICAL CHARACTERISTICS (T_a=25°C Unless otherwise specified)

Parameter	Test Conditions	Symbol	Max	Unit
Forward voltage	I _F =200mA	V _F	1.2	V

FIG.1-TEMPERATURE COEFFICIENTS
(-55°C to +150°C temperature, 90% of the units are in the ranges indicated)



■ RATINGS AND CHARACTERISTIC CURVES

FIG.2-EFFECT OF ZENER CURRENT ON ZENER IMPEDANCE, $T_J=25^\circ\text{C}$, $f=60\text{Hz}$

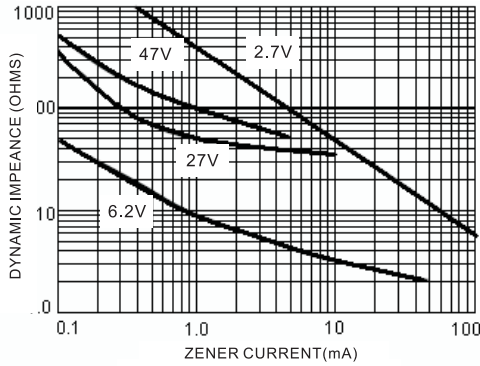
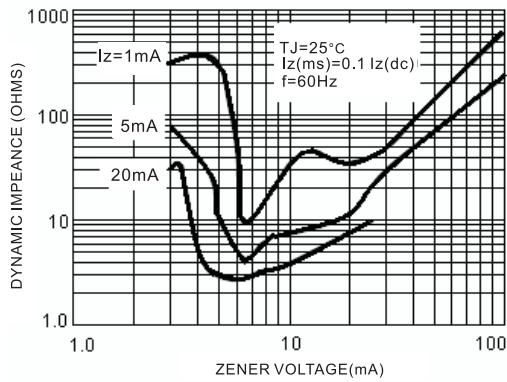
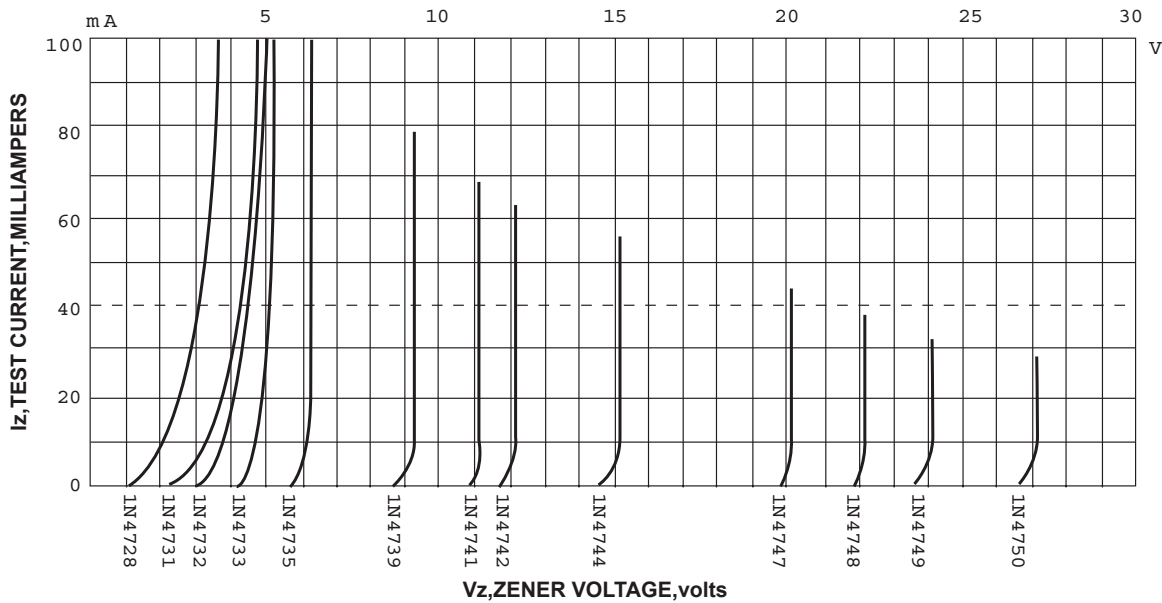


FIG.3-EFFECT OF ZENER CURRENT ON ZENER IMPEDANCE

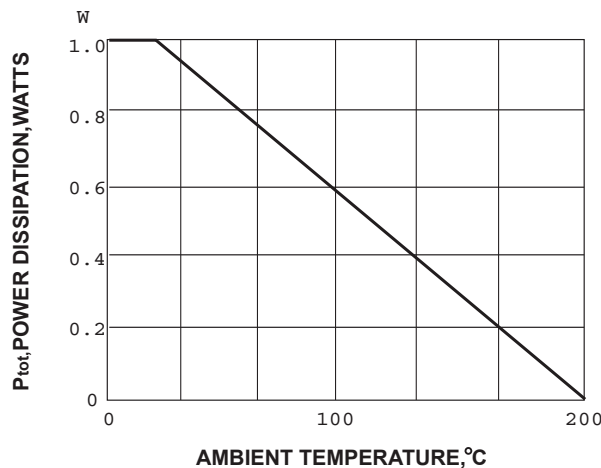


■ FIG1: ADMISSIBLE POWER DISSIPATION vs. AMBIENT TEMPERATURE

Breakdown characteristics



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



■ ELECTRICAL SPECIFICATIONS (T_a=25°C Unless otherwise specified)

Part Number	Nominal Zener Voltage	Test Current	Maximum Dynamic Impedance			Maximum Reverse Leakage Current		Surge Current	Maximum Regulator Current
	V _Z at I _{ZT}	I _{ZT}	Z _{ZT} at I _{ZT}	Z _{ZK} at I _{ZK}	I _{ZK}	I _R	Test voltage V _R	at T _A =25°C I _R	I _{ZM}
	V	mA	Ω	Ω	mA	μA	V	mA	mA
1N4728A	3.3	76	10	400	1	100	1	1380	276
1N4729A	3.6	69	10	400	1	100	1	1260	252
1N4730A	3.9	64	9	400	1	50	1	1190	234
1N4731A	4.3	58	9	400	1	10	1	1070	217
1N4732A	4.7	53	8	500	1	10	1	970	193
1N4733A	5.1	49	7	550	1	10	1	890	178
1N4734A	5.6	45	5	600	1	10	2	810	162
1N4735A	6.2	41	2	700	1	10	3	730	146
1N4736A	6.8	37	3.5	700	1	10	4	660	133
1N4737A	7.5	34	4	700	0.5	10	5	605	121
1N4738A	8.2	31	4.5	700	0.5	10	6	550	110
1N4739A	9.1	28	5	700	0.5	10	7	500	100
1N4740A	10	25	7	700	0.25	10	7.6	454	91
1N4741A	11	23	8	700	0.25	5	8.4	414	83
1N4742A	12	21	9	700	0.25	5	9.1	380	76
1N4743A	13	19	10	700	0.25	5	9.9	344	69
1N4744A	15	17	14	700	0.25	5	11.4	304	61
1N4745A	16	15.5	16	700	0.25	5	12.2	285	57
1N4746A	18	14	20	750	0.25	5	13.7	250	50
1N4747A	20	12.5	22	750	0.25	5	15.2	225	45
1N4748A	22	11.5	23	750	0.25	5	16.7	205	41
1N4749A	24	10.5	25	750	0.25	5	18.2	190	38
1N4750A	27	9.5	35	750	0.25	5	20.6	170	34
1N4751A	30	8.5	40	1000	0.25	5	22.8	150	30
1N4752A	33	7.5	45	1000	0.25	5	25.1	135	27
1N4753A	36	7	50	1000	0.25	5	27.4	125	25
1N4754A	39	6.5	60	1000	0.25	5	29.7	115	23
1N4755A	43	6	70	1500	0.25	5	32.7	110	22
1N4756A	47	5.5	80	1500	0.25	5	35.8	95	19
1N4757A	51	5	95	1500	0.25	5	38.8	90	18
1N4758A	56	4.5	110	2000	0.25	5	42.6	80	16
1N4759A	62	4	125	2000	0.25	5	47.1	70	14
1N4760A	68	3.7	150	2000	0.25	5	51.7	65	13
1N4761A	75	3.3	175	2000	0.25	5	56	60	12
1N4762A	82	3.0	200	3000	0.25	5	62.2	55	11
1N4763A	91	2.8	250	3000	0.25	5	69.2	50	10
1N4764A	100	2.5	350	3000	0.25	5	76.0	45	9

Note 1: VF=1.2V@IF=200mA, Tolerance of zener voltage: ±10%, suffix "A" for ±5%, suffix "C" for ±2%, suffix "D" for ±1%

■ PACKAGING INFORMATION

DEVICE NAME	ORDERING CODE	TAPED UNITS PER REEL
1N4728A to 1N4764A	1N4728AA to 1N4764AA	5000 per ammopack (52 mm tape)
1N4728A-PP to 1N4764A-PP	1N4728A-PPA to 1N4764A-PPA	5000 per ammopack (52 mm tape)

PACKAGE NAME	WEIGHT	MOLDING COMPOUND FLAMMABILITY RATING	MOISTURE SENSITIVITY LEVEL	SOLDERING CONDITIONS
DO-41	310 mg	UL 94 V-0	MSL level 1 (according J-STD-020)	Peak temperature max. 260°C