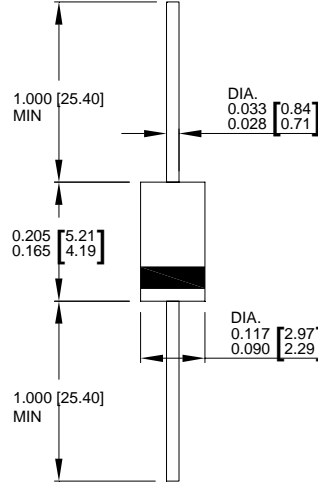


FEATURES

- * Glass passivated chip
- * Low leakage
- * Built-in strain relief
- * Low inductance
- * High peak reverse power dissipation
- * For use in stabilizing and clipping circuits with high power rating

MECHANICAL DATA

- * Case: Molded plastic
- * Epoxy:UL 90V-0 rate flame reardant
- * Terminals: Axial leads, solderable per MIL-STD-202, method 208 guaranteed
- * Polarity: Color band denotes positive end
- * Mounting Position: Any
- * Weight: 0.33 gram



Dimensions in inches and (millimeters)

MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.
 Single phase half wave, 60Hz, resistive of inductive load.
 For capacitive load, derate current by 20%

PARAMETER	SYMBOL	VALUE	UNIT
DC Power Dissipation at TL=50°C (Note 1)	P _D	1	Watt
Junction Temperature Range	T _J	-55 to 175	°C
Storage Temperature Range	T _S	-55 to 175	°C

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

PARAMETER	SYMBOL	Min.	Typ.	Max.	Amps
Typical Thermal Resistance (Note 2)	R _{θJA}	-	-	170	K/mW
Forward Voltage Range at 0.2A DC	V _F	-	-	1.2	V

Note:

(1) TL=Lead temperayure at 3/8" (9.5mm) from boby

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

TECHNOLOGY ZENER 1W SERIES	Nominal Zener Voltage		Maximum Zener Impedance			Maximum Reverse Leakage Current		Maximum DC Zener Current	Maximum Surge Current	Marking Code
	VZ @ IZT	IZT	ZZT @ IZT	ZZK @ IZK	IZK	IR @ VR		IZM	IRM	
	(V)	(mA)	(Ω)	(Ω)	(mA)	(mA)	(V)	(mA)	(mApk)	
1N4736AP	6.8	37.0	3.5	700	1.0	10	4.0	133	660	1N4736A
1N4737AP	7.5	34.0	4.0	700	0.5	10	5.0	121	605	1N4737A
1N4738AP	8.2	31.0	4.5	700	0.5	10	6.0	110	550	1N4738A
1N4739AP	9.1	28.0	5.0	700	0.5	10	7.0	100	500	1N4739A
1N4740AP	10	25.0	7.0	700	0.25	10	7.6	91	454	1N4740A
1N4741AP	11	23.0	8.0	700	0.25	5.0	8.4	83	414	1N4741A
1N4742AP	12	21.0	9.0	700	0.25	5.0	9.1	76	380	1N4742A
1N4743AP	13	19.0	10	700	0.25	5.0	9.9	69	344	1N4743A
1N4744AP	15	17.0	14	700	0.25	5.0	11.4	61	305	1N4744A
1N4745AP	16	15.5	16	700	0.25	5.0	12.2	57	285	1N4745A
1N4746AP	18	14.0	20	750	0.25	5.0	13.7	50	250	1N4746A
1N4747AP	20	12.5	22	750	0.25	5.0	15.2	45	225	1N4747A
1N4748AP	22	11.5	23	750	0.25	5.0	16.7	41	205	1N4748A
1N4749AP	24	10.5	25	750	0.25	5.0	18.2	38	190	1N4749A
1N4750AP	27	9.5	35	750	0.25	5.0	20.6	34	170	1N4750A
1N4751AP	30	8.5	40	1000	0.25	5.0	22.8	30	150	1N4751A
1N4752AP	33	7.5	45	1000	0.25	5.0	25.1	27	135	1N4752A
1N4753AP	36	7.0	50	1000	0.25	5.0	27.4	25	125	1N4753A
1N4754AP	39	6.5	60	1000	0.25	5.0	29.7	23	115	1N4754A
1N4755AP	43	6.0	70	1500	0.25	5.0	32.7	22	110	1N4755A
1N4756AP	47	5.5	80	1500	0.25	5.0	35.8	19	95	1N4756A
1N4757AP	51	5.0	95	1500	0.25	5.0	38.8	18	90	1N4757A
1N4758AP	56	4.5	110	2000	0.25	5.0	42.6	16	80	1N4758A
1N4759AP	62	4.0	125	2000	0.25	5.0	47.1	14	70	1N4759A
1N4760AP	68	3.7	150	2000	0.25	5.0	51.7	13	65	1N4760A
1N4761AP	75	3.3	175	2000	0.25	5.0	56.0	12	60	1N4761A
1N4762AP	82	3.0	200	3000	0.25	5.0	62.2	11	55	1N4762A
1N4763AP	91	2.8	250	3000	0.25	5.0	69.2	10	50	1N4763A
1N4764AP	100	2.5	350	3000	0.25	5.0	76.0	9.0	45	1N4764A

Notes :

- (1) The type number listed have a standard tolerance on the nominal zener voltage of $\pm 5\%$.
- (2) The reverse surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed



1N4736AP THRU 1N4764AP

PB FREE PRODUCT

1W GLASS PASSIVATED CHIP & PLASTIC CASE ZENER DIODE

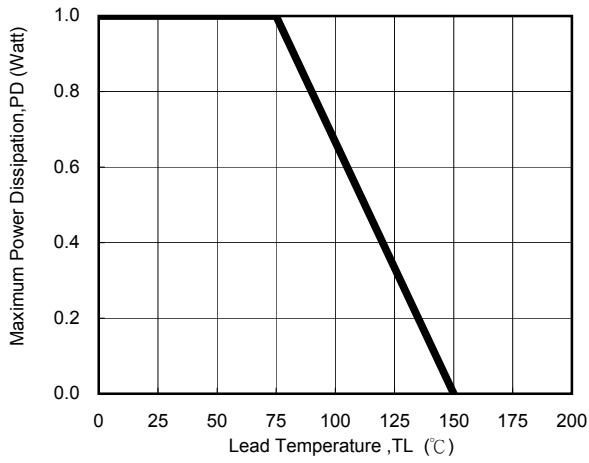


Fig. 1 - Power Temperature Derating Curve

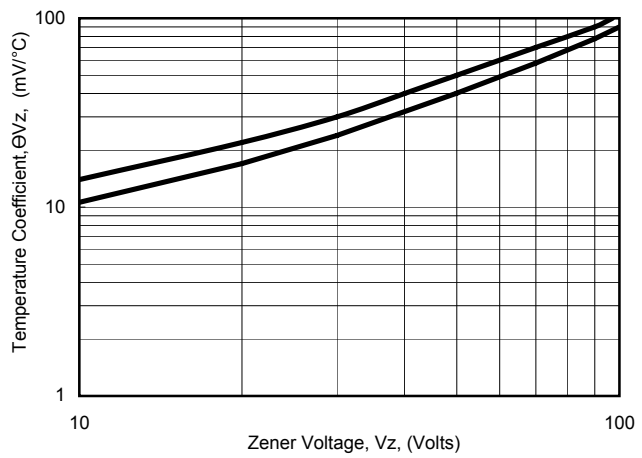


Fig. 2 - Temperature Coefficients v.s. Zener Voltage

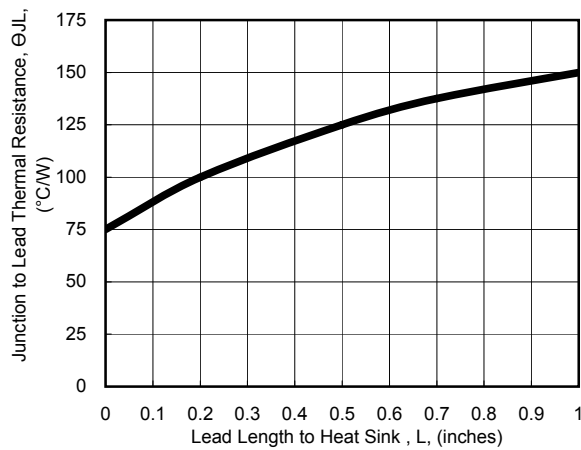


Fig. 3 - Typical Thermal Resistance v.s. Lead Length

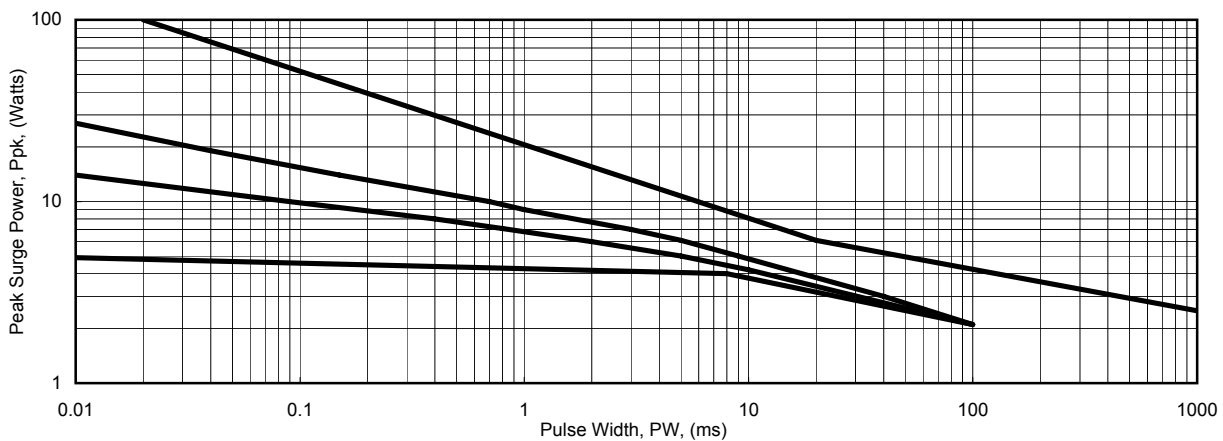


FIG.4 - Maximum Surge Power