1N4736AP~1N4764AP

ZENER DIODES

VOLTAGE	6.8 to 100 Volt	POWER	1.0 Watt

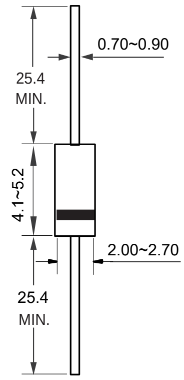
FEATURES

- Excellent clamping capability
- Glasss Passivated Junction
- Wide Zener Voltage Range Available
- Low Zener Impedance
- Lead free in compliance with EU RoHS

MECHANICAL DATA

- Case Material: Molded Plastic.
- UL Flammability Classification Rating 94V-0

DO-41 Unit:mm



MAXIMUM RATINGS AND ELECTRICAL CHARACTERISTICS

Ratings at 25°C ambient temperature unless otherwise specified.

Characteristic	Symbol	Value	Unit
Forward Voltage @ I_F = 200mA	V_F	1.2	V
Power Dissipation	P_d	1.0	W
Thermal Resistance from Junction to Ambient	$R_{\theta JA}$	125	℃/W
Junction Temperature	T_j	150	℃
Storage Temperature Range	T_{stg}	-55~+150	℃

1N4736AP~1N4764AP

ELECTRICAL CHARACTERISTICS @25°C

Partnumber	Nominal Zener Voltage[1]	Test Current	Maximum Dynamic Impedance			Maximum Reverse Leakage Current		Surge Current[3]	Maximum Regulator Current[2]
	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
1N4736AP	6.8	37	3.5	700	1	10	4	660	133
1N4737AP	7.5	34	4	700	0.5	10	5	605	121
1N4738AP	8.2	31	4.5	700	0.5	10	6	550	110
1N4739AP	9.1	28	5	700	0.5	10	7	500	100
1N4740AP	10	25	7	700	0.25	10	7.6	454	91
1N4741AP	11	23	8	700	0.25	5	8.4	414	83
1N4742AP	12	21	9	700	0.25	5	9.1	380	76
1N4743AP	13	19	10	700	0.25	5	9.9	344	69
1N4744AP	15	17	14	700	0.25	5	11.4	304	61
1N4745AP	16	15.5	16	700	0.25	5	12.2	285	57
1N4746AP	18	14	20	750	0.25	5	13.7	250	50
1N4747AP	20	12.5	22	750	0.25	5	15.2	225	45
1N4748AP	22	11.5	23	750	0.25	5	16.7	205	41
1N4749AP	24	10.5	25	750	0.25	5	18.2	190	38
1N4750AP	27	9.5	35	750	0.25	5	20.6	170	34
1N4751AP	30	8.5	40	1000	0.25	5	22.8	150	30
1N4752AP	33	7.5	45	1000	0.25	5	25.1	135	27
1N4753AP	36	7	50	1000	0.25	5	27.4	125	25
1N4754AP	39	6.5	60	1000	0.25	5	29.7	115	23
1N4755AP	43	6	70	1500	0.25	5	32.7	110	22
1N4756AP	47	5.5	80	1500	0.25	5	35.8	95	19
1N4757AP	51	5	95	1500	0.25	5	38.8	90	18
1N4758AP	56	4.5	110	2000	0.25	5	42.6	80	16
1N4759AP	62	4	125	2000	0.25	5	47.1	70	14
1N4760AP	68	3.7	150	2000	0.25	5	51.7	65	13
1N4761AP	75	3.3	175	2000	0.25	5	56	60	12
1N4762AP	82	3.0	200	3000	0.25	5	62.2	55	11
1N4763AP	91	2.8	250	3000	0.25	5	69.2	50	10
1N4764AP	100	2.5	350	3000	0.25	5	76.0	45	9

1) Based on dc-measurement at thermal equilibrium while maintaining the lead temperature (T_L) at 30 °C + 1 °C, 9.5 mm (3/8") from the diode body.

2) Valid provided that electrodes at a distance of 4 mm from case are kept at ambient temperature.

3) T_P = 10 ms.

RATING AND CHARACTERISTIC CURVES

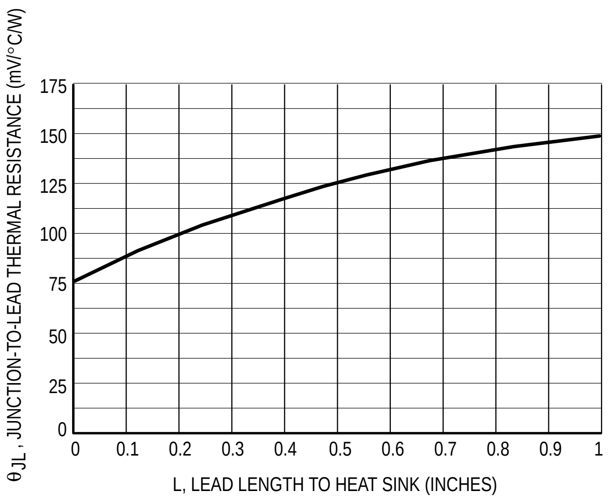


Figure 1. Typical Thermal Resistance versus Lead Length

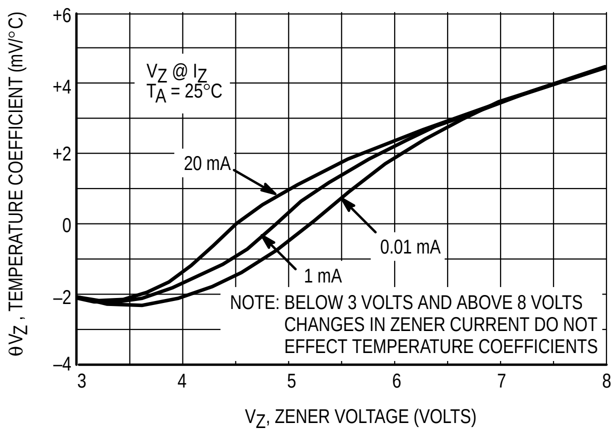


Figure 2. Effect of Zener Current

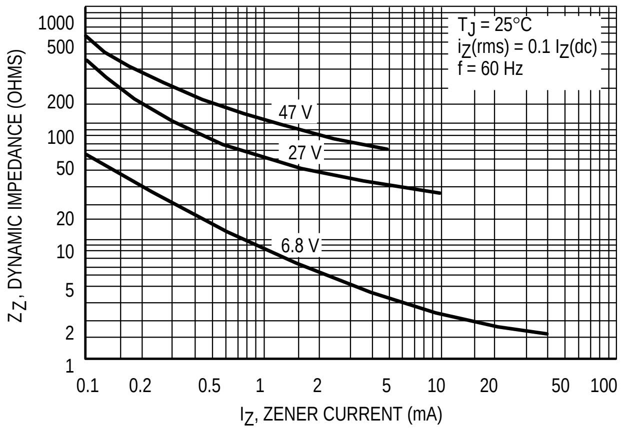


Figure 3. Effect of Zener Current on Zener Impedance

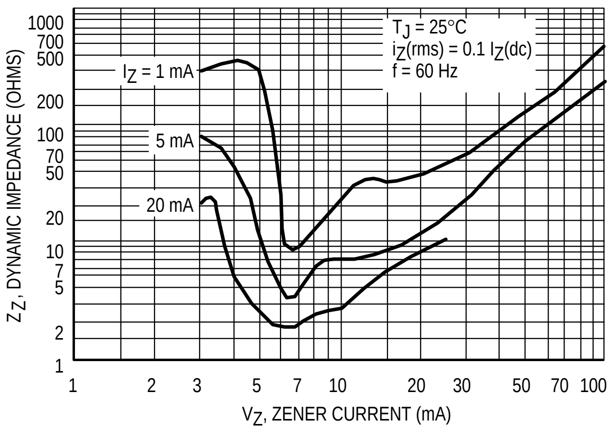
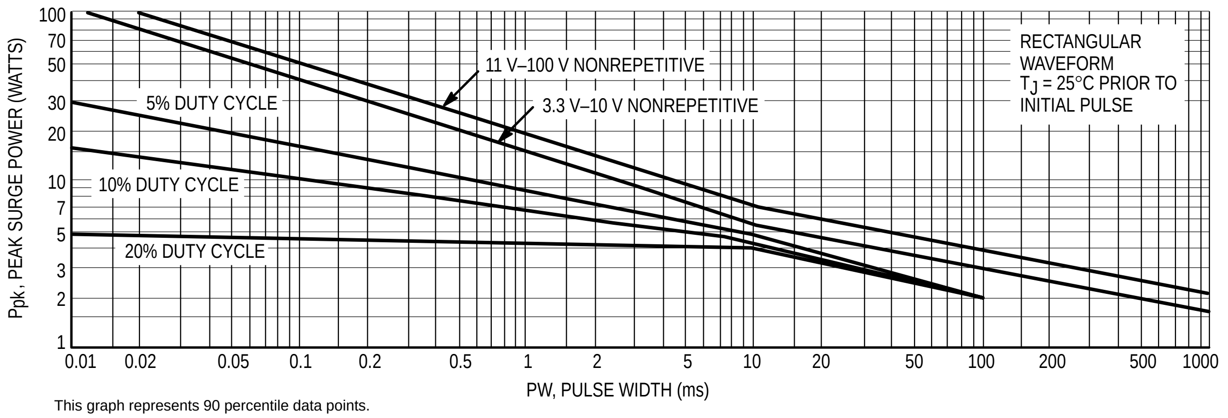


Figure 4. Effect of Zener Voltage on Zener Impedance



This graph represents 90 percentile data points.
For worst case design characteristics, multiply surge power by 2/3.

Figure 5. Maximum Surge Power

1N4736AP~1N4764AP

ORDER INFORMATION

- Packing information

Part Number	Case	Reel Size	QUANTITY
1N4736AP~1N4764AP	D0-41	13 Inch	5000