

Zener Diodes

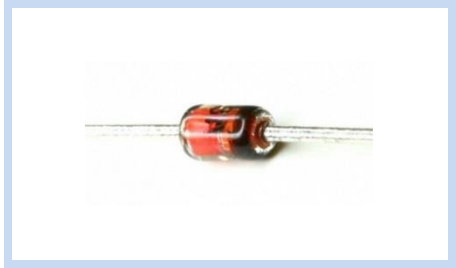
DO-41G Package

1N4728A to 1N4758A

MERITEK

FEATURE

- Reverse Voltage: 3.3 ~ 56V
- Peak Power Dissipation: 1.0W
- Hermetically Sealed Glass
- All ecternal surface are corrosion resistant
- Cathode idicatede by polarity band



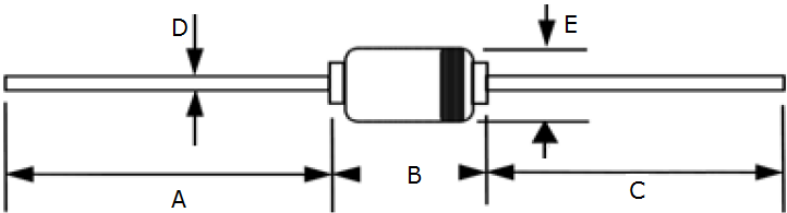
MAXIMUM RATINGS AND CHARACTERISTICS

Parameter	Symbol	Value	Unit
Peak Power Dissipation	P_{PPM}	1.0	Watt
Forward Voltage at $I_F = 200mA$	V_F	1.2	Volts
Thermal Resistance Junction to Ambient	$R_{\theta JA}$	100	$^{\circ}C/W$
Operating junction Temperature Range	T_J	175	$^{\circ}C$
Storage Temperature Range	T_{STG}	-65~+175	$^{\circ}C$

Ratings at 25°Cambient temperature unless otherwise specified.

DIMENSIONS

Item	DO-41G (mm)	
	Min.	Max.
A	25.40	-
B	4.07	5.20
C	25.40	-
D	0.72	0.86
E	2.04	2.71



SPECIFICATIONS

Type	Normal Zener Voltage @ I_{ZT}	I_{ZT}	Z_{ZT} Max. @ I_{ZT}	I_{ZK}	Z_{ZK} Max. @ I_{ZK}	I_R Max. @ V_R	V_R
	V_Z (V)	mA	Ω	mA	Ω	μA	V
1N4728A	3.3	76	10	1	400	100	1.0
1N4729A	3.6	69	10	1	400	100	1.0
1N4730A	3.9	64	9	1	400	50	1.0
1N4731A	4.3	58	9	1	400	10	1.0
1N4732A	4.7	53	8	1	500	10	1.0
1N4733A	5.1	49	7	1	550	10	1.0
1N4734A	5.6	45	5	1	600	10	2.0
1N4735A	6.2	41	2	1	700	10	3.0
1N4736A	6.8	37	3.5	1	700	10	4.0

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SPECIFICATIONS (CONTINUED)

Type	Normal Zener Voltage @ I_{ZT}	I_{ZT}	Z_{ZT} Max. @ I_{ZT}	I_{ZK}	Z_{ZK} Max. @ I_{ZK}	I_R Max. @ V_R	V_R
	V_Z (V)	mA	Ω	mA	Ω	μA	V
1N4737A	7.5	34	4	0.5	700	10	5.0
1N4738A	8.2	31	4.5	0.5	700	10	6.0
1N4739A	9.1	28	5	0.5	700	10	7.0
1N4740A	10.0	25	7	0.25	700	10	7.6
1N4741A	11.0	23	8	0.25	700	5	8.4
1N4742A	12.0	21	9	0.25	700	5	9.1
1N4743A	13.0	19	10	0.25	700	5	9.9
1N4744A	15.0	17	14	0.25	700	5	11.4
1N4745A	16.0	15.5	16	0.25	700	5	12.2
1N4746A	18.0	14	20	0.25	700	5	13.7
1N4747A	20.0	12.5	22	0.25	700	5	15.2
1N4748A	22.0	11.5	23	0.25	750	5	16.7
1N4749A	24.0	10.5	25	0.25	750	5	18.2
1N4750A	27.0	9.5	35	0.25	750	5	20.6
1N4751A	30.0	8.5	40	0.25	750	5	22.8
1N4752A	33.0	7.5	45	0.25	1000	5	25.1
1N4753A	36.0	7	50	0.25	1000	5	27.4
1N4754A	39.0	6.5	60	0.25	1000	5	29.7
1N4755A	43.0	6	70	0.25	1500	5	32.7
1N4756A	47.0	5.5	80	0.25	1500	5	35.8
1N4757A	51.0	5	95	0.25	1500	5	38.8
1N4758A	56.0	4.5	110	0.25	2000	5	42.6

- Note:
1. The type numbers listed have a standard tolerance on the nominal zener voltage of $\pm 5\%$. Device tolerance of $\pm 2\%$ is indicated by a "C" instead of an "A".
 2. The zener voltage (V_Z) is tested under pulse condition. The measured V_Z is guaranteed to be within specification with device junction in thermal equilibrium.
 3. The zener impedance is derived from the 60-cycle ac voltage, which results when an AC current having an RMS value equal to 10% of the DC zener current (I_{ZT} or I_{ZK}) is superimposed to I_{ZT} or I_{ZK} .

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RATING AND CHARACTERISTIC CURVES

Figure 1. Power Dissipation vs Ambient Temperature

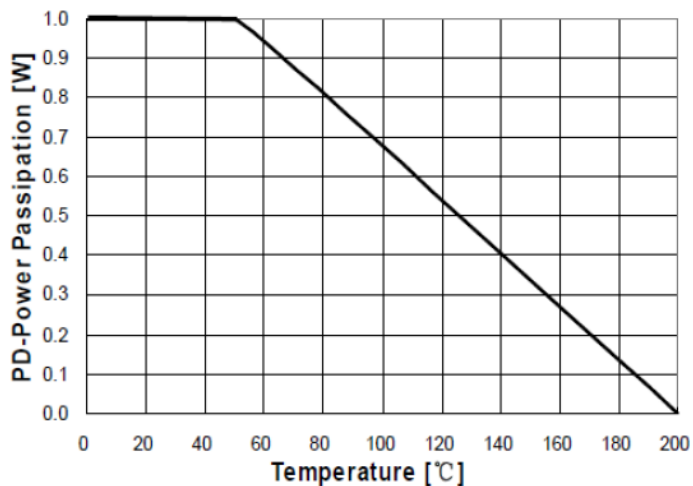


Figure 2. Total Capacitance

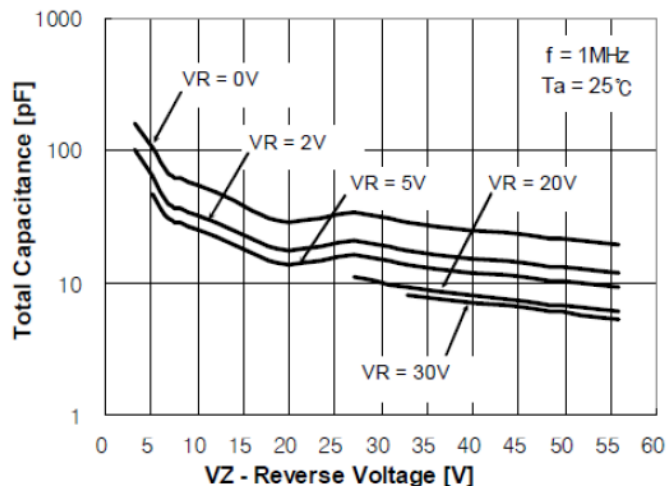


Figure 3. Differential Impedance vs. Zener Voltage

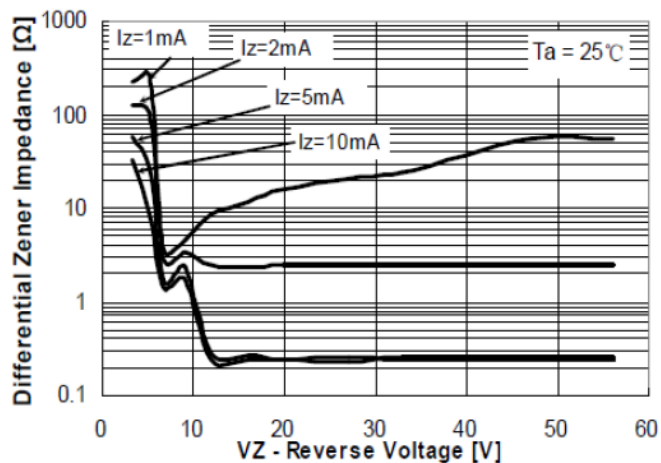


Figure 4. Forward Current vs. Forward Voltage

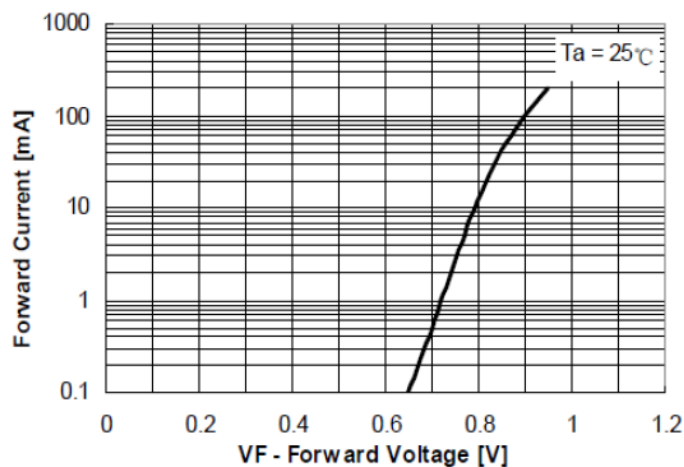


Figure 5. Reverse Current vs. Reverse Voltage

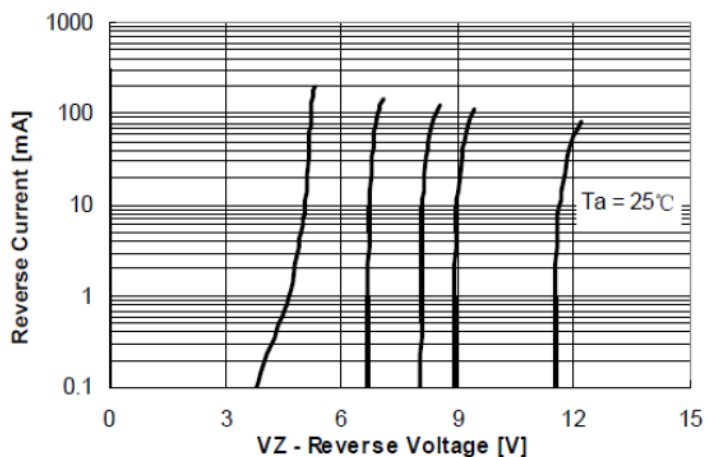


Figure 6. Reverse Current vs. Reverse Voltage

