FAIRCHILD
SEMICONDUCTOR®

Zeners
1N746A - 1N759A

Absolute Maximum Ratings*

T_A = 25°C unless otherwise noted

Symbol	Parameter	Value	Units
P_D	Power Dissipation	500	mW
T_{STG}	Storage Temperature Range	-65 to +200	°C
T_J	Operating Junction Temperature	+ 175	°C
	Lead Temperature (1/16" from case for 10 seconds)	+ 230	°C

*These ratings are limiting values above which the serviceability of the diode may be impaired.

NOTES:
1) These ratings are based on a maximum junction temperature of 200 degrees C.
2) These are steady state limits. The factory should be consulted on applications involving pulsed or low duty cycle operations.

Tolerance: A = 5%

DO-35
COLOR BAND DENOTES CATHODE

Electrical Characteristics

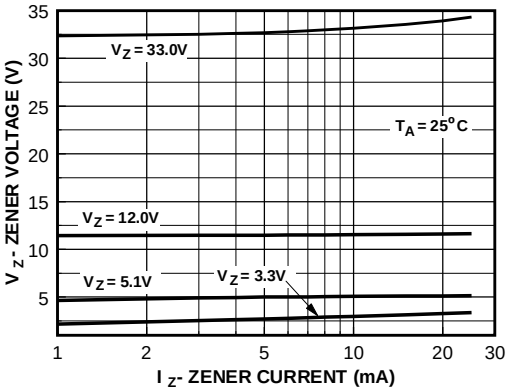
T_A = 25°C unless otherwise noted

Device	V_Z (V)	$Z_Z(\Omega)$ @ I_Z(mA)		$I_{R1}(\mu A)$ @ V_R(V)		$I_{R2}(\mu A)$ @ V_R(V) T_A=150°C		T_C (%/°C)	I_{ZRM}*(mA)
1N746A	3.3	28	20	10	1.0	30	1.0	- 0.070	110
1N747A	3.6	24	20	10	1.0	30	1.0	- 0.065	100
1N748A	3.9	23	20	10	1.0	30	1.0	- 0.060	95
1N749A	4.3	22	20	2.0	1.0	30	1.0	+/- 0.055	85
1N750A	4.7	19	20	2.0	1.0	30	1.0	+/- 0.030	75
1N751A	5.1	17	20	1.0	1.0	20	1.0	+/- 0.030	70
1N752A	5.6	11	20	1.0	1.0	20	1.0	+ 0.038	65
1N753A	6.2	7.0	20	0.1	1.0	20	1.0	+ 0.045	60
1N754A	6.8	5.0	20	0.1	1.0	20	1.0	+ 0.050	55
1N755A	7.5	6.0	20	0.1	1.0	20	1.0	+ 0.058	50
1N756A	8.2	8.0	20	0.1	1.0	20	1.0	+ 0.062	45
1N757A	9.1	10	20	0.1	1.0	20	1.0	+ 0.068	40
1N758A	10	17	20	0.1	1.0	20	1.0	+ 0.075	35
1N759A	12	30	20	0.1	1.0	20	1.0	+ 0.077	38

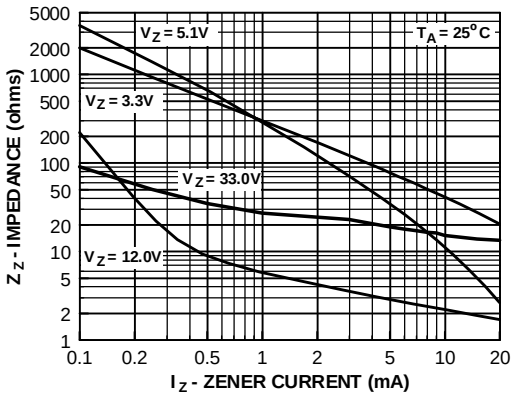
*I_{ZRM} (Maximum Zener Current Rating) Values shown are based on the JEDEC rating of 400 milliwatts. Where the actual zener voltage (VZ) is known at the operating point, the maximum zener current may be increased and is limited by the derating curve.

Zeners (1N746A - 1N759A)
(continued)

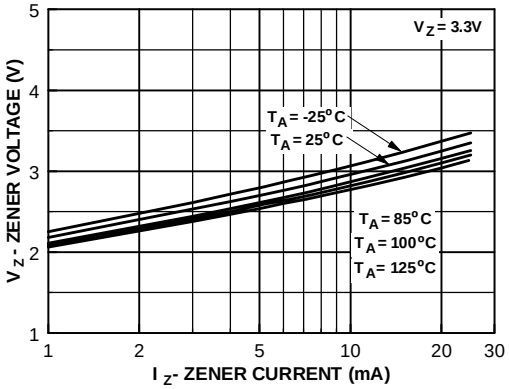
Typical Characteristics



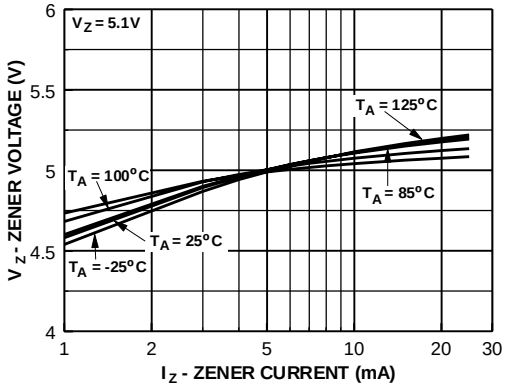
Zener Current vs. Zener Voltage



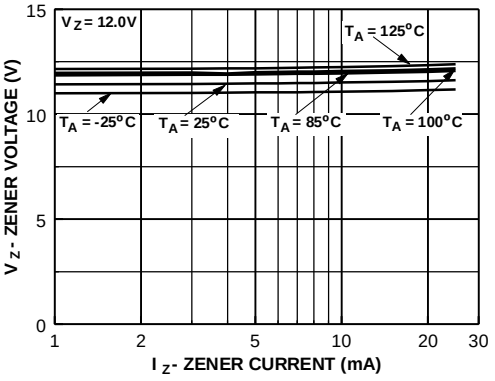
Zener Current vs. Zener Impedence



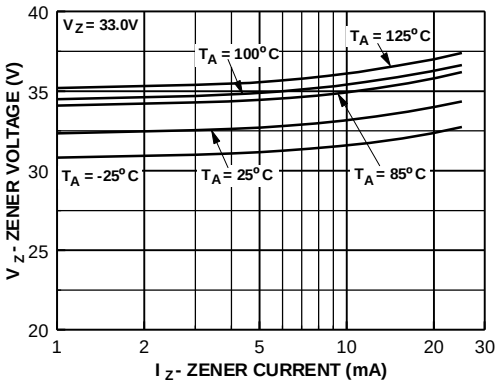
3.3 Zener Voltage vs. Temperature



5.1 Zener Voltage vs. Temperature



12 Zener Voltage vs. Zener Temperature



33 Zener Voltage vs. Zener Temperature

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