

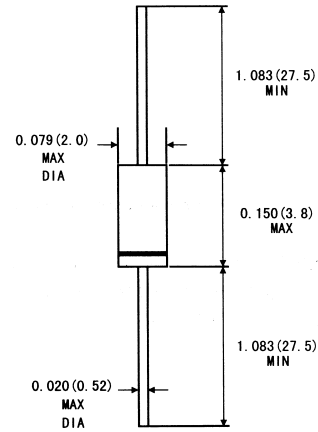
### FEATURES

- Silicon planar power zener diodes
- Standards zener voltage tolerance is  $\pm 10\%$ . Add suffix "A" for  $5\% \pm$  tolerance, other tolerance are available upon request

### MECHANICAL DATA

- **Case:** DO-35 glass case
- **Polarity:** Color band denotes cathode end
- **Weight:** Approx. 0.13gram

DO-35



Dimensions in inches and (millimeters)

### ABSOLUTE MAXIMUM RATINGS(LIMITING VALUES)( $T_A=25^\circ\text{C}$ )

	Symbols	Value	Units
Zener current see table "Characteristics"			
Power dissipation at $T_A=50^\circ\text{C}$	$P_{tot}$	500 <sup>1)</sup>	mW
Junction temperature	$T_J$	175	$^\circ\text{C}$
Storage temperature range	$T_{STG}$	-65 to + 175	$^\circ\text{C}$

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

### ELECTRICAL CHARACTERISTICS( $T_A=25^\circ\text{C}$ )

	Symbols	Min.	Typ.	Max.	Units
Thermal resistance junction to ambient	$R_{\theta JA}$			300 <sup>1)</sup>	$^\circ\text{C/W}$
Forward voltage at $I_F=200\text{mA}$	$V_F$			1.5	

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



**1N746..1N759 SILICON PLANAR ZENER DIODES**

Type	Zener Voltage Range <sup>1)</sup>		Maximum zener impedance Z <sub>ZR</sub> at I <sub>ZR</sub>	Typical Temperature coefficient %/°C	Maximum Reverse Leakage Current I <sub>R</sub> <sup>2)</sup> at V <sub>R</sub> =1V		Maximum Regulator Current I <sub>ZM</sub>
	V <sub>Z</sub>	I <sub>ZT</sub>			T <sub>A</sub> =25°C	T <sub>A</sub> =150°C	
	V	mA	Ω	%/°C	μA	μA	mA
1N746	3.3	20	28	-0.062	10	30	110
1N747	3.6		24	-0.055			
1N748	3.9		23	-0.049			
1N749	4.3		22	-0.036	2		85
1N750	4.7		19	-0.018			75
1N751	5.1		17	-0.008			1
1N752	5.6		11	+0.006	0.1	65	
1N753	6.2		7	+0.022		60	
1N754	6.8		5	+0.035		20	55
1N755	7.5		6	+0.045			50
1N756	8.2		8	+0.052			45
1N757	9.1		10	+0.056		40	
1N758	10.0		17	+0.060	35		
1N759	12.0		30	+0.060	30		

1) Tested with pulses t<sub>p</sub>=20ms

2) Valid provided that are kept at ambient temperature at a distance of 8mm from case.