



# ZGL41-100 thru ZGL41-200A

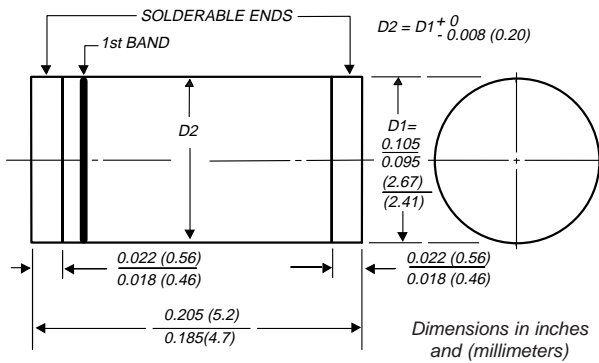
Vishay Semiconductors  
formerly General Semiconductor

## Surface Mount Glass Passivated Zeners



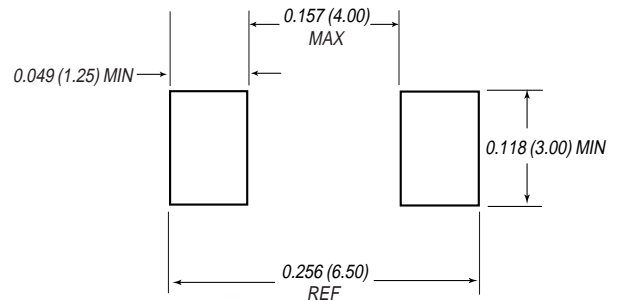
DO-213AB

Zener Voltage 100 to 200V  
Steady State Power 1.0W



1st band denotes type and positive end (cathode)

### Mounting Pad Layout



### Features

- Plastic package has Underwriters Laboratory Flammability Classification 94V-0
- For surface mount applications
- Glass passivated junction
- Low Zener impedance
- Low regulation factor
- High temperature soldering guaranteed: 250°C/10 seconds at terminals

### Mechanical Data

Case: JEDEC DO-213AB molded plastic body over passivated junction

Terminals: Solder plated, solderable per MIL-STD-750, Method 2026

Polarity: Red band denotes Zener diode and positive end (cathode)

Mounting Position: Any

Weight: 0.0046 oz., 0.116 g

Packaging codes/options:

26/5K per 13" Reel (12mm tape), 60K/box  
46/1.5K per 7" Reel (12mm tape), 30K/box

## Maximum Ratings and Electrical Characteristics (T<sub>A</sub> = 25°C unless otherwise noted)

Operating junction and storage temperature range: T<sub>J</sub>, T<sub>STG</sub>: -55°C to +150°C

Type	Nominal Zener Voltage at I <sub>ZT</sub> (Note 1) V <sub>Z</sub> (V)	Test Current I <sub>ZT</sub> (mA)	Maximum Zener Dynamic Impedance			Maximum DC Reverse Leakage Current at V <sub>R</sub>		Maximum Surge Current (Note 2) I <sub>RM</sub> (mA <sub>dc</sub> )	Max. Instantaneous Forward Voltage at 200mA V <sub>F</sub> (V)
			Z <sub>KT</sub> at I <sub>ZT</sub> (Ω)	Z <sub>KK</sub> at I <sub>ZK</sub> (Ω) (mA)		I <sub>R</sub> (μA)	V <sub>R</sub> (V)		
ZGL41-100	100	3.7	250	3100	0.25	1.0	76.0	10.0	1.5
ZGL41-110	110	3.4	300	4000	0.25	1.0	83.6	9.1	1.5
ZGL41-120	120	3.1	380	4500	0.25	1.0	91.2	8.3	1.5
ZGL41-130	130	2.9	450	5000	0.25	1.0	98.8	7.7	1.5
ZGL41-140	140	2.7	525	5500	0.25	1.0	106.4	7.1	1.5
ZGL41-150	150	2.5	600	6000	0.25	1.0	114.0	6.7	1.5
ZGL41-160	160	2.3	700	6500	0.25	1.0	121.6	6.3	1.5
ZGL41-170	170	2.2	800	6750	0.25	1.0	129.2	5.9	1.5
ZGL41-180	180	2.1	900	7000	0.25	1.0	136.9	5.6	1.5
ZGL41-190	190	2.0	1050	7500	0.25	1.0	144.4	5.3	1.5
ZGL41-200	200	1.9	1200	8000	0.25	1.0	152.0	5.0	1.5

#### Notes:

- (1) Standard voltage tolerance is ±10%, Suffix A = ±5%
- (2) Surge current is a non-repetitive, 8.3ms pulse width square wave or equivalent sine-wave superimposed on I<sub>ZT</sub> per JEDEC Method
- (3) Maximum steady state power dissipation is 1.0 watt at T<sub>T</sub> = 75°C

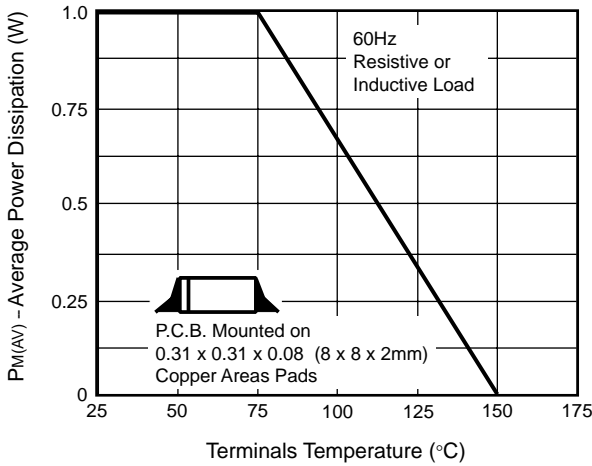
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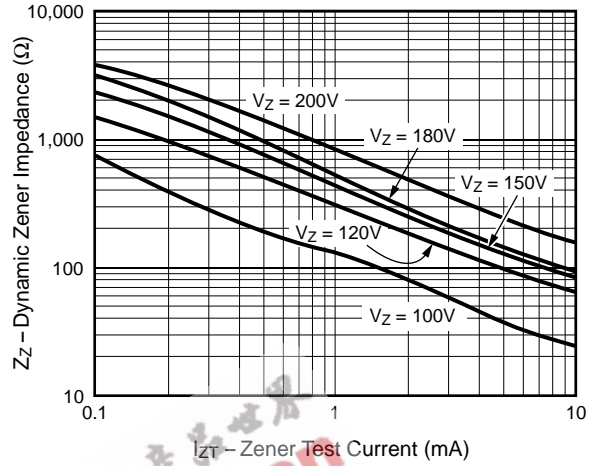
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## Ratings and Characteristic Curves ( $T_A = 25^\circ\text{C}$ unless otherwise noted)

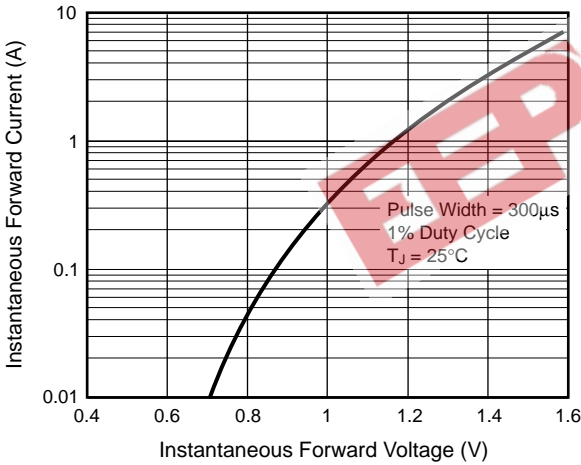
**Fig. 1 – Maximum Continuous Power Dissipation**



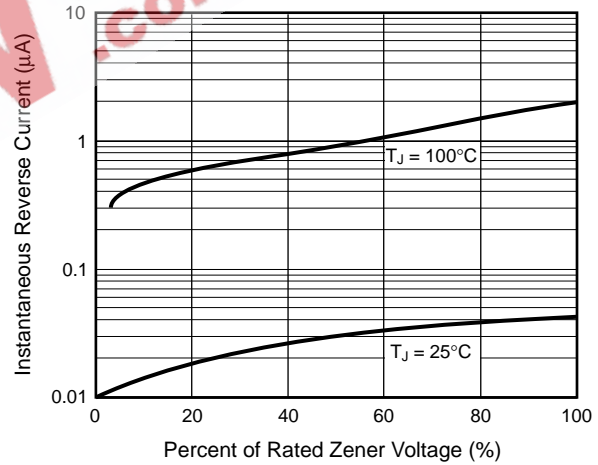
**Fig. 2 – Typical Zener Impedance**



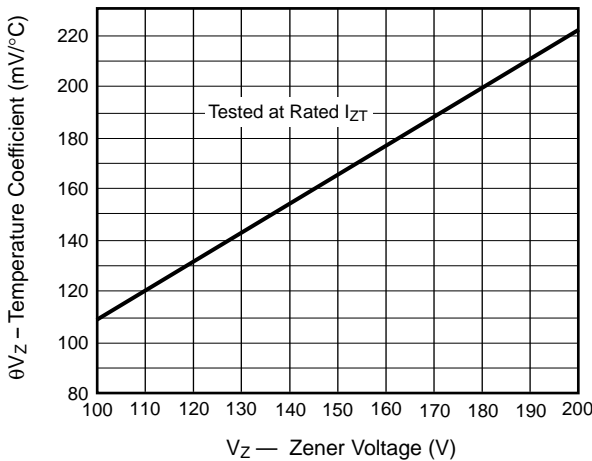
**Fig. 3 – Typical Instantaneous Forward Characteristics**



**Fig. 4 – Typical Reverse Characteristics**



**Fig. 5 – Steady State Power Derating Curve**



**Fig. 6 – Typical Zener Voltage**

