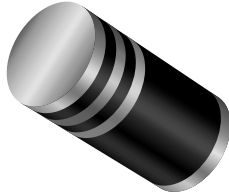




Surface Mount Glass Passivated Power Voltage-Regulating Diodes



DO-213AB (GL41)

FEATURES

- Plastic MELF package
- Ideal for automated placement
- Glass passivated chip junction
- Low Zener impedance
- Low regulation factor
- Meets MSL level 1, per J-STD-020C, LF maximum peak of 250 °C
- Compliant to RoHS Directive 2002/95/EC and in accordance to WEEE 2002/96/EC



RoHS COMPLIANT

TYPICAL APPLICATIONS

For general purpose regulation and protection applications.

PRIMARY CHARACTERISTICS	
V _Z	100 V to 200 V
P _{tot}	1000 mW
I _R	1.0 μA
T _J max.	150 °C
V _Z specification	Pulse current
Int. construction	Single

MECHANICAL DATA

Case: DO-213AB (GL41)

Molding compound meets UL 94 V-0 flammability rating
Base P/N-E3 - RoHS compliant, commercial grade

Terminals: Matte tin plated leads, solderable per J-STD-002 and JESD 22-B102

M3 suffix meets JESD 201 class 1A whisker test

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

MAXIMUM RATINGS (T _A = 25 °C unless otherwise noted)			
PARAMETER	SYMBOL	VALUE	UNIT
Operating junction and storage temperature range	T _J , T _{STG}	- 55 to + 150	°C

ELECTRICAL CHARACTERISTICS ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)										
TYPE	NOMINAL ZENER VOLTAGE AT I_{ZT} (1) V_Z (V)	TEST CURRENT I_{ZT} (mA)	MAXIMUM ZENER DYNAMIC IMPEDANCE			MAXIMUM DC REVERSE LEAKAGE CURRENT AT V_R		MAXIMUM SURGE CURRENT (2) I_{RM} (mA _{dc})	MAX. INSTANTANEOUS FORWARD VOLTAGE AT 200 mA V_F (V)	
			Z_{ZT} AT I_{ZT}		Z_{ZK} AT I_{ZK}		I_R			V_R
			(Ω)	(Ω)	(mA)	(μA)				
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 $\pm 10\%$, suffix A = $\pm 5\%$
- (2) Surge current is a non-repetitive, 8.3 ms pulse width square wave or equivalent sine-wave superimposed on I_{ZT} per JEDEC method
- (3) Maximum steady state power dissipation is 1.0 W at $T_L = 75\text{ }^\circ\text{C}$

ORDERING INFORMATION (Example)				
PREFERRED P/N	UNIT WEIGHT (g)	PREFERRED PACKAGE CODE	BASE QUANTITY	DELIVERY MODE
ZGL41-100-E3/96	0.134	96	1500	7" diameter plastic tape and reel
ZGL41-100-E3/97	0.134	97	5000	13" diameter plastic tape and reel

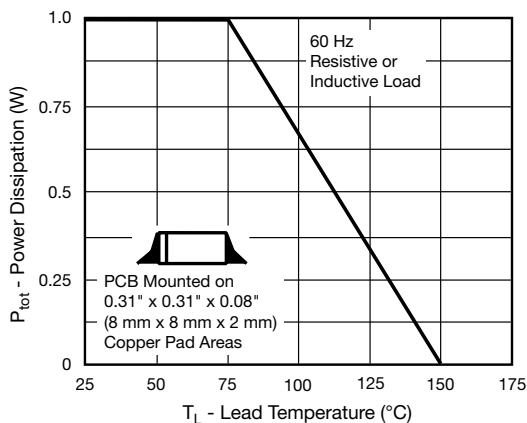
RATINGS AND CHARACTERISTICS CURVES ($T_A = 25\text{ }^\circ\text{C}$ unless otherwise noted)


Fig. 1 - Maximum Continuous Power Dissipation

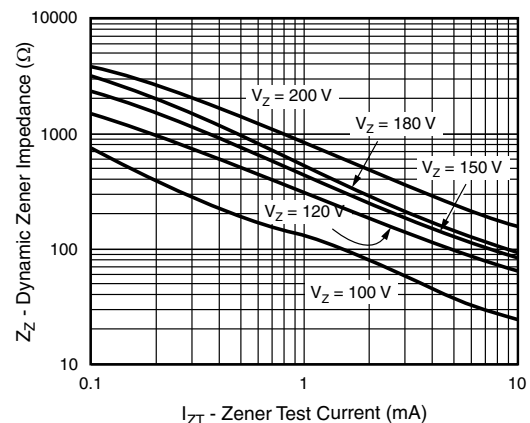


Fig. 2 - Typical Zener Impedance

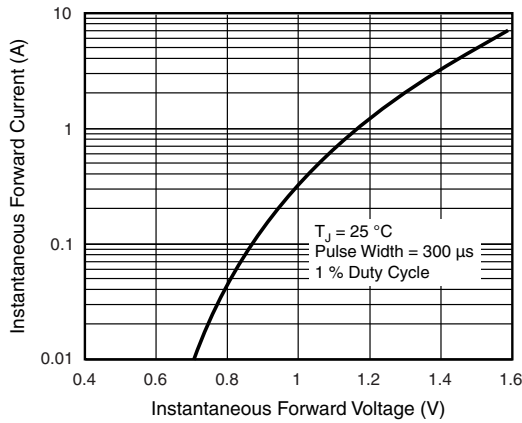


Fig. 3 - Typical Instantaneous Forward Characteristics

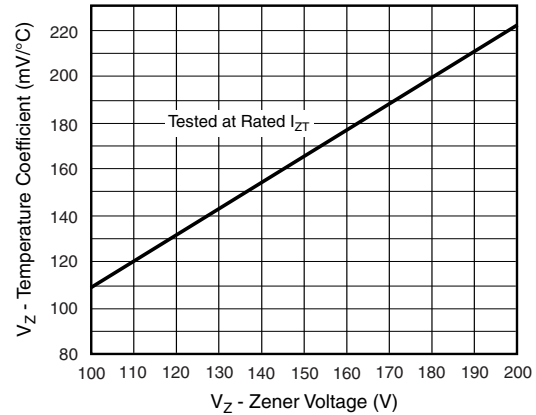


Fig. 5 - Steady State Power Derating Curve

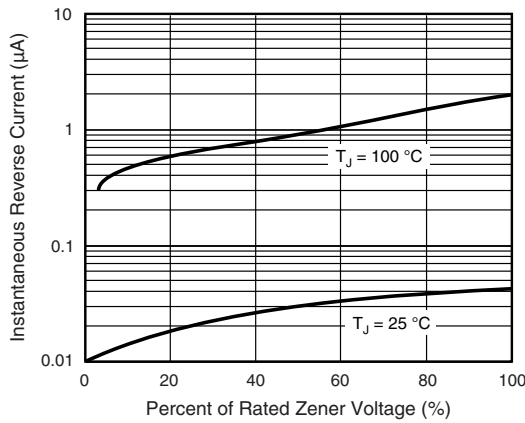


Fig. 4 - Typical Reverse Characteristics

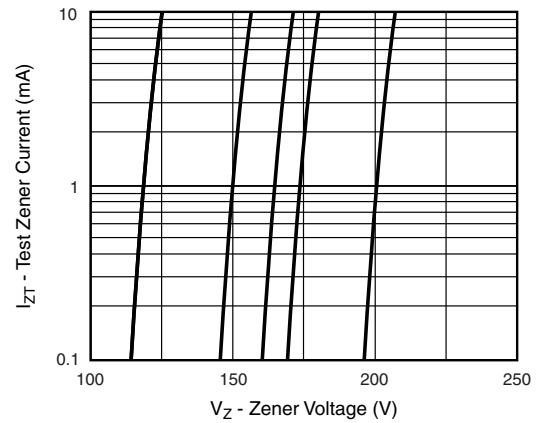
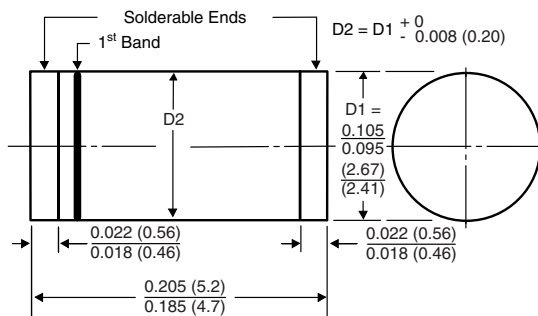


Fig. 6 - Typical Zener Voltage

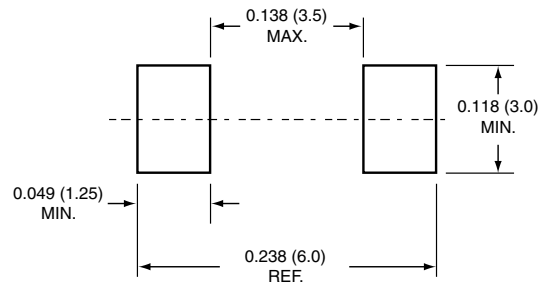
PACKAGE OUTLINE DIMENSIONS in inches (millimeters)

DO-213AB (GL41)



1st Band Denotes Type and Positive End (Cathode)

Mounting Pad Layout





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