



DZL6V8AXV3

DUAL SURFACE MOUNT ZENER DIODE

Features

- Ultra-Small Surface Mount Package
- Lead Free/RoHS Compliant (Note 3)
- "Green" Device (Note 4)

ESD Sensitivity Rating

• IEC61000-4-2, HBM - 16kV, MM - 400V

Mechanical Data

- Case: SOT-523
- Case Material: Molded Plastic, "Green" Molding Compound. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020D
- Terminals: Solderable per MIL-STD-202, Method 208
- Lead Free Plating (Matte Tin Finish annealed over Alloy 42 leadframe).
- Polarity: See Diagram

Device Schematic

- Marking Information: See Page 2
- Ordering Information: See Page 2
- Weight: 0.002 grams (approximate)



Top View

Maximum Ratings $@T_A = 25^{\circ}C$ unless otherwise specified

C	haracteristic	Symbol	Value	Unit
Forward Voltage	@ I _F = 10mA	VF	0.9	V

Thermal Characteristics

Characteristic	Symbol	Value	Unit
Power Dissipation	PD	220	mW
Thermal Resistance, Junction to Ambient Air	$R_{ heta JA}$	625	°C/W
Operating and Storage Temperature Range	T _{J,} T _{STG}	-65 to +150	٥C

Electrical Characteristics $@T_A = 25^{\circ}C$ unless otherwise specified

Type Number	Marking Code	Zener Voltage Range (Note 1) Vz @ Izt		Maximum Zener Impedance (Note 2)			Maximum Current		Temperature Coefficient of Zener Voltage @ I _{ZT} = 5mA			
				V _{Z @} I _{ZT} Z _{ZT} @ I _{ZT} Z _{ZK} @ I _{ZK}				I _R @ V _R		TC (mV/°C)		
		Nom (V)	Min (V)	Max (V)	Ω	mA	Ω	mA	μA	v	Min	Max
DZL6V8AXV3	K96	6.8	6.46	7.14	15	5.0	100	1.0	1.0	4.5	1.2	4.5

Notes: 1. Short duration pulse test used to minimize self-heating.

2. f = 1KHz.

3. No purposefully added lead.

4. Diodes Inc.'s "Green" Policy can be found on our website at http://www.diodes.com/products/lead_free/index.php.



DZL6V8AXV3





Fig. 2 Typical Zener Breakdown Characteristics

Ordering Information (Note 5)

Part Number	Case	Packaging
DZL6V8AXV3-7	SOT-523	3000/Tape & Reel

Notes: 5. For packaging details, go to our website at http://www.diodes.com/datasheets/ap02007.pdf.

Marking Information



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	Month	Jan	Feb	Mar	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec
	Code	1	2	3	4	5	6	7	8	9	0	Ν	D



Package Outline Dimensions



	SOT-523							
Dim	Min	Max	Тур					
Α	0.15	0.30	0.22					
В	0.75	0.85	0.80					
С	1.45	1.75	1.60					
D	_	_	0.50					
G	0.90	1.10	1.00					
Н	1.50	1.70	1.60					
J	0.00	0.10	0.05					
κ	0.60	0.80	0.75					
L	0.10	0.30	0.22					
М	0.10	0.20	0.12					
Ν	0.45	0.65	0.50					
α	0°	8°						
All	Dimens	ions in I	mm					

Suggested Pad Layout



Dimensions	Value (in mm)
Z	1.8
Х	0.4
Y	0.51
С	1.3
E	0.7

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