

1W SURFACE MOUNT POWER ZENER DIODE PowerDI® 123

Features

- 1W Power Dissipation on Polyimide PCB
- Patented Interlocking Clip Design, US Patent #7,095113
- Lead Free Finish, RoHS Compliant (Note 2)
- "Green" Molding Compound (No Br, Sb)
- Qualified to AEC-Q101 Standards for High Reliability

Mechanical Data

- Case: PowerDI®123
- Case Material: Molded Plastic, "Green" Molding Compound. UL Flammability Classification Rating 94V-0
- Moisture Sensitivity: Level 1 per J-STD-020
- Terminal Connections: Cathode Band
- Terminals: Finish Matte Tin annealed over Copper leadframe.
 Solderable per MIL-STD-202, Method 208
- Marking Information: See Page 2
 Ordering Information: See Page 2
 Weight: 0.01 grams (approximate)



Top View

Maximum Ratings @T_A = 25°C unless otherwise specified

	Characteristic	Symbol	Value	Unit
Forward Voltage	@ I _F = 200mA	V_{F}	1.2	V

Thermal Characteristics

Characteristic	Symbol	Тур	Max	Unit
Power Dissipation (Note 1)	P_{D}	_	1.0	W
Thermal Resistance, Junction to Ambient Air (Note 1)	$R_{\theta JA}$	110	130	°C/W
Operating and Storage Temperature Range	T _J , T _{STG}	-55	to +150	°C

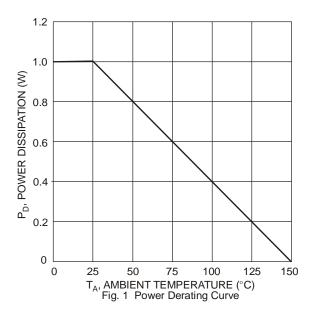
Electrical Characteristics @T_A = 25°C unless otherwise specified

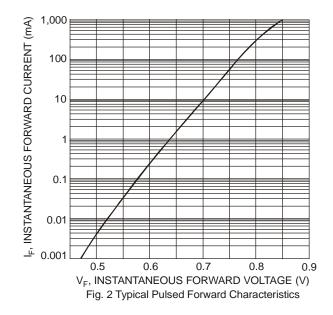
Type Number	Marking Codes	Zener Voltage Range (Note 3)			Maximum Zener Impedance (Note 4)		Maximum Reverse Current (Note 3)		Typical Temperature Coefficient @ Iztc %/°C		
			$V_Z @ I_{ZT}$		I _{ZT}	Z _{ZT} (@ I _{ZT}	I _R	@ V _R		
		Nom (V)	Min (V)	Max (V)	mΑ	Typ (Ω)	Max (Ω)	μΑ	٧	Min	Max
DFLZ62	FJY	62	58	65	10	25	80	1	47	0.16	0.82

Notes:

- 1. Device mounted on polyimide substrate, double-sided PC board with 2 oz. copper land patterns having area 16 times the suggested pad layout as seen on page 3.
- 2. EU Directive 2002/95/EC (RoHS). All applicable RoHS exemptions applied. Please visit our website at http://www.diodes.com/products/lead_free.html.
- 3. Pulse test to minimize self-heating.
- 4. f = 1kHz.





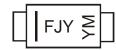


Ordering Information (Note 5)

Device	Packaging	Shipping
DFLZ62-7	PowerDI [®] 123	3000/Tape & Reel

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

Marking Information



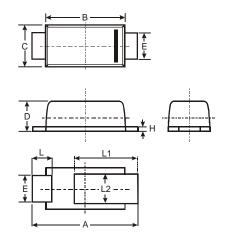
FJY = Product Type Marking Code YM = Date Code Marking Y = Year (ex: W = 2009)

M = Month (ex: 9 = September)

Date Code Kev

Date Code ite												
Year	2009	9	2010	2010 2011		2011 2012		2013		2014		2015
Code	W		X		Υ	2	7	Α		В		С
Month	Jan	Feb	Mar	Apr	Mav	Jun	Jul	Aug	Sep	Oct	Nov	Dec
WICHT	Jan	I CD	IVIAI	Αρι	iviay	Juli	Jui	Aug	Jep	OCI	1404	Dec
Code	1	2	3	4	5	6	7	8	9	0	N	D

Package Outline Dimensions

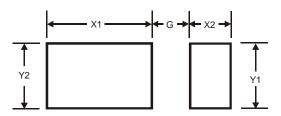


PowerDI®123						
Dim	Min	Max	Тур			
Α	3.50	3.90	3.70			
В	2.60	3.00	2.80			
O	1.63	1.93	1.78			
ם	0.93	1.00	0.98			
Е	0.85	1.25	1.00			
Н	0.15	0.25	0.20			
L	0.55	0.75	0.65			
L1	1.80	2.20	2.00			
L2	0.95	1.25	1.10			
All Dimensions in mm						

PowerDI is a registered trademark of Diodes Incorporated.



Suggested Pad Layout



Dimensions	Value (in mm)
G	1.0
X1	2.2
X2	0.9
Y1	1.4
Y2	1.4

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