LZ52C4V7W - LZ52C36W(LS)

THE LZ52C4V7W - LZ52C36W(LS) IS NOT RECOMMENDED FOR NEW DESIGNS. PLEASE CONTACT US.

SURFACE-MOUNT ZENER DIODE

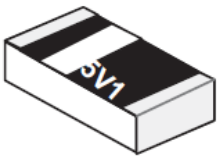
REVERSE VOLTAGE – 4.7 to 36 Volts
POWER DISSIPATION – 500 mWatts

FEATURES

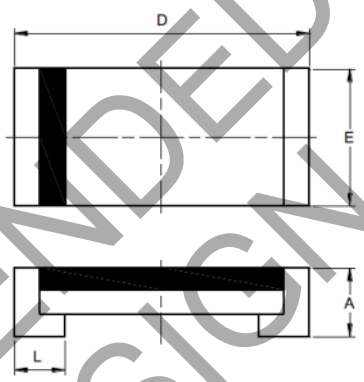
- For surface mounted application
- Silicon epitaxial planar diode
- Ultra small surface-mount package
- Low-leakage current
- 2% tolerance device of Vz
- **Lead-Free Finish; RoHS Compliant (Notes 1 & 2)**
- **Halogen and Antimony Free. "Green" Device (Note 3)**

MECHANICAL DATA

- Package: 1206
- Package Material: "Green" molding compound (No Br, Sb, Cl)
- Terminals: Lead Free Plating
- Polarity : Color band denotes cathode
- Weight : 10mg (Approximate)



1206



1206			
Dim	Min	Max	Typ
A	0.65	0.85	0.75
D	3.00	3.40	3.20
E	1.30	1.70	1.50
L	0.35	0.75	0.55
All Dimensions in mm			

NOT RECOMMENDED FOR NEW DESIGN

MAXIMUM RATINGS & THERMAL CHARACTERISTICS @ T_A = 25°C unless otherwise specified.

Characteristic	Symbol	Value	Unit
Total Power Dissipation	P_{TOT}	500	mW
Thermal Resistance Junction to Ambient Air	$R_{\Theta JA}$	300	°C/W
Operating and Storage Temperature Range	T_J ,T_{STG}	-65 to +175	°C

ELECTRICAL CHARACTERISTICS @ T_A = 25°C unless otherwise specified.

Parameters	Symbol	Test Condition	Max.	Unit
Forward Voltage	V_F	IF = 200mA	1.5	V

Notes:
1. EU Directive 2002/95/EC (RoHS), 2011/65/EU (RoHS 2) & 2015/863/EU (RoHS 3) compliant. All applicable RoHS exemptions applied.
2. See https://www.diodes.com/quality/lead-free/ for more information about Diodes Incorporated's definitions of Halogen- and Antimony-free, "Green" and Lead-free.
3. Halogen- and Antimony-free "Green" products are defined as those which contain <900ppm bromine, <900ppm chlorine (<1500ppm total Br + Cl) and <1000ppm antimony compounds.

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Type Number	Marking Code	Zener Voltage Range (Note 4)		Test Current	Maximum Zener Impedance		Maximum Reverse Current	
		V_Z @ I_{ZT}		I_{ZT}	Z_{ZT} @ I_{ZT}	Z_{ZK} @ I_{ZK}=1.0mA	I_R	@V_R
		Min (V)	Max (V)	mA	Ω	Ω	uA	V
LZ52C4V7W	4V7	4.61	4.79	5	70	600	0.5	1.0
LZ52C5V1W	5V1	5.00	5.20	5	50	520	0.1	1.0
LZ52C5V6W	5V6	5.48	5.72	5	30	450	0.1	1.0
LZ52C6V2W	6V2	6.08	6.32	5	10	200	0.1	2.0
LZ52C6V8W	6V8	6.66	6.94	5	8	150	0.1	3.0
LZ52C7V5W	7V5	7.35	7.65	5	7	50	0.1	5.0
LZ52C8V2W	8V2	8.04	8.36	5	7	50	0.1	6.2
LZ52C9V1W	9V1	8.92	9.28	5	10	50	0.1	6.8
LZ52C10W	10	9.80	10.20	5	15	70	0.1	7.5
LZ52C11W	11	10.78	11.22	5	20	70	0.1	8.2
LZ52C12W	12	11.76	12.24	5	20	90	0.1	9.1
LZ52C13W	13	12.74	13.26	5	26	110	0.1	10
LZ52C15W	15	14.70	15.30	5	30	110	0.1	11
LZ52C16W	16	15.68	16.32	5	40	170	0.1	12
LZ52C18W	18	17.64	18.36	5	50	170	0.1	13
LZ52C20W	20	19.60	20.40	5	55	220	0.1	15
LZ52C22W	22	21.56	22.44	5	55	220	0.1	16
LZ52C24W	24	23.52	24.48	5	80	220	0.1	18
LZ52C27W	27	26.46	27.54	5	80	220	0.1	20
LZ52C30W	30	29.40	30.60	5	80	220	0.1	22
LZ52C33W	33	32.34	33.66	5	80	220	0.1	24
LZ52C36W	36	35.28	36.72	5	80	220	0.1	27

Note:

4. Tested with pulses, t_P < 100ms.

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TYPICAL CHARACTERISTICS
LZ52C4V7W - LZ52C36W

Fig.1 POWER DISSIPATION DERATING CURVE

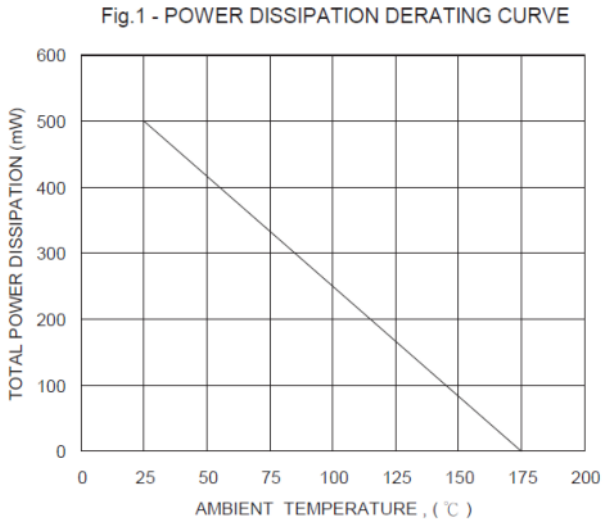


Fig.2 TYPICAL FORWARD CHARACTERISTICS

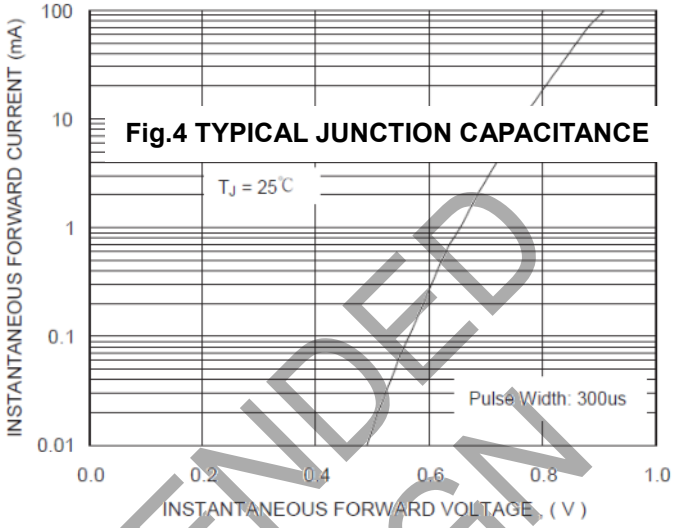


Fig.3 ZENER CURRENT vs. ZENER VOLTAGE

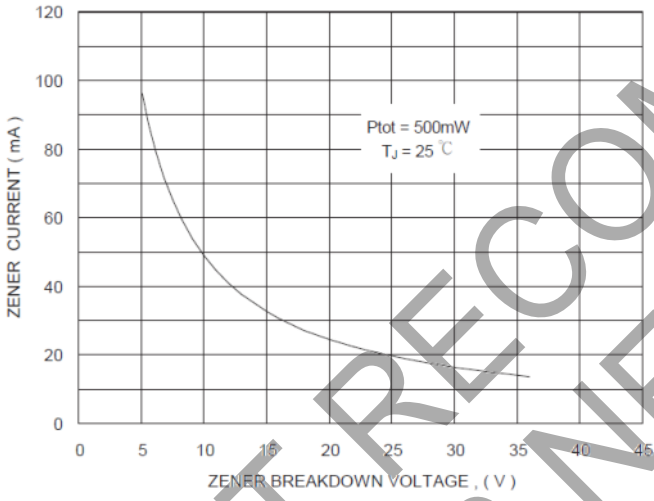
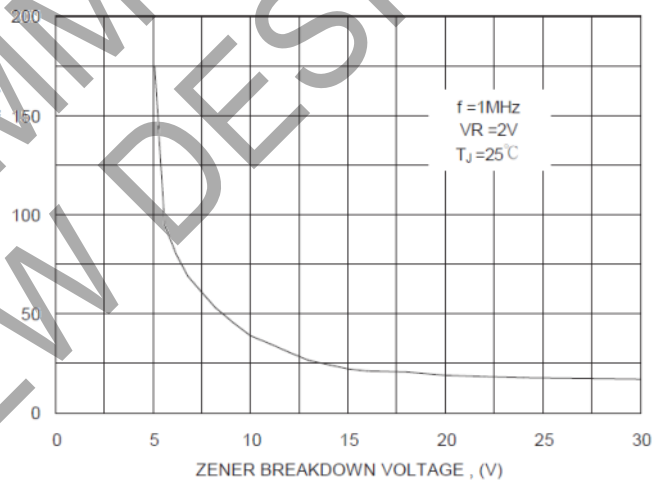
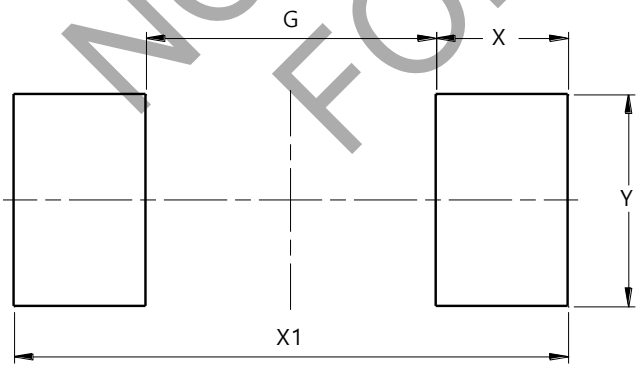


Fig.4 TYPICAL JUNCTION CAPACITANCE



Suggested Pad Layout



Dimensions	Value (in mm)
G	2.2
X	1.0
X1	4.2
Y	1.6

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Ordering Information:

Part Number	Package	Packing	
		Qty.	Carrier
LZ52C4V7W	1206	5000pcs	Tape & Reel
LZ52C5V1W	1206	5000pcs	Tape & Reel
LZ52C5V6W	1206	5000pcs	Tape & Reel
LZ52C6V2W	1206	5000pcs	Tape & Reel
LZ52C6V8W	1206	5000pcs	Tape & Reel
LZ52C7V5W	1206	5000pcs	Tape & Reel
LZ52C8V2W	1206	5000pcs	Tape & Reel
LZ52C9V1W	1206	5000pcs	Tape & Reel
LZ52C10W	1206	5000pcs	Tape & Reel
LZ52C11W	1206	5000pcs	Tape & Reel
LZ52C12W	1206	5000pcs	Tape & Reel
LZ52C13W	1206	5000pcs	Tape & Reel
LZ52C15W	1206	5000pcs	Tape & Reel
LZ52C16W	1206	5000pcs	Tape & Reel
LZ52C18W	1206	5000pcs	Tape & Reel
LZ52C20W	1206	5000pcs	Tape & Reel
LZ52C22W	1206	5000pcs	Tape & Reel
LZ52C24W	1206	5000pcs	Tape & Reel
LZ52C27W	1206	5000pcs	Tape & Reel
LZ52C30W	1206	5000pcs	Tape & Reel
LZ52C33W	1206	5000pcs	Tape & Reel
LZ52C36W	1206	5000pcs	Tape & Reel

Marking Information:



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