

SURFACE MOUNT ZENER DIODE

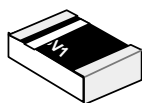
ZENER VOLTAGE - 5.1 to 36 Volts
 POWER DISSIPATION - 500 mWatts

FEATURES

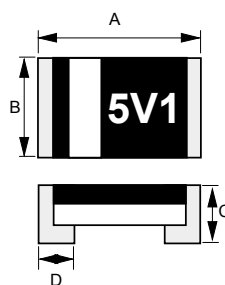
- For surface mounted application
- Silicon epitaxial planar diode
- Ultra small surface mount package
- Low leakage current
- 2% tolerance device of Vz

MECHANICAL DATA

- Case : 0805
- Case Material: "Green" molding compound, UL flammability classification 94V-0, (No Br. Sb. Cl)
- Terminals: Lead Free Plating
- Polarity : Color band denotes cathode
- Weight : Approx.10mg



0805



0805		
Dim.	Min.	Max.
A	1.80	2.20
B	1.05	1.45
C	0.75	0.95
D	0.25	0.65
All Dimensions in millimeter		

Maximum Ratings and Thermal Characteristics @ T_A = 25°C unless otherwise specified

Characteristic	Symbol	Value	Units
Total Power Dissipation	P _{TOT}	500	mW
Thermal Resistance Junction to Ambient Air	R _{θJA}	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	I _F = 200 mA	1.5	V

REV. 4, Oct-2010, KSJS02

Fig.1 - POWER DISSIPATION DERATING CURVE

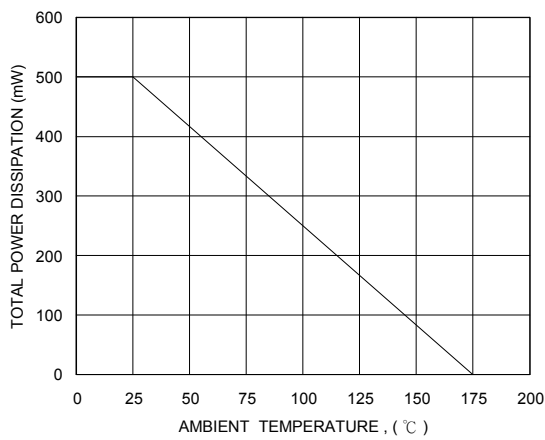


Fig.4 - ZENER CURRENT v.s ZENER VOLTAGE

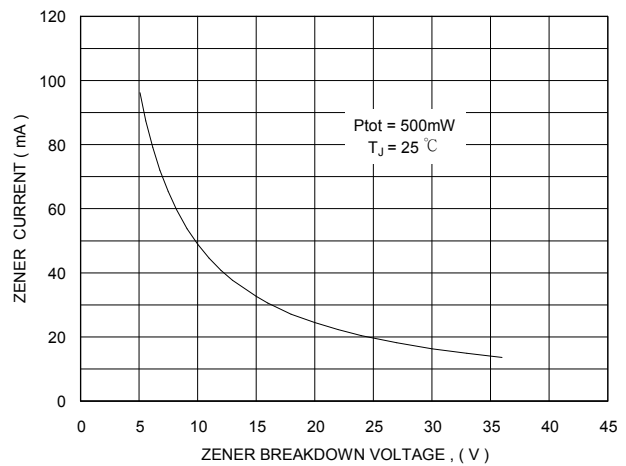


Fig.2-TYPICAL FORWARD CHARACTERISTICS

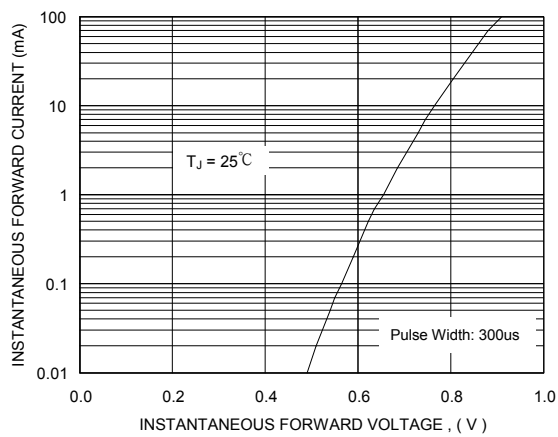


Fig.5-TYPICAL JUNCTION CAPACITANCE

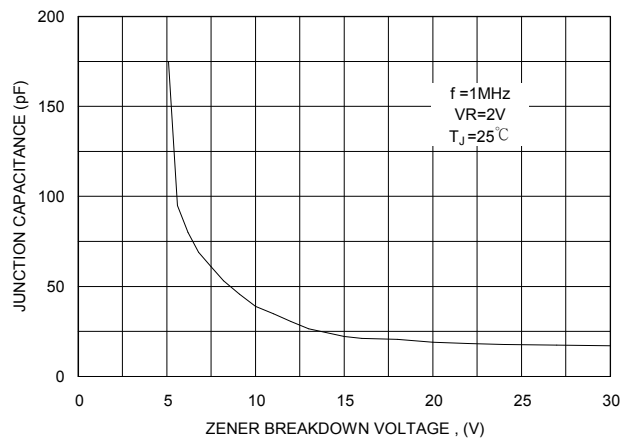
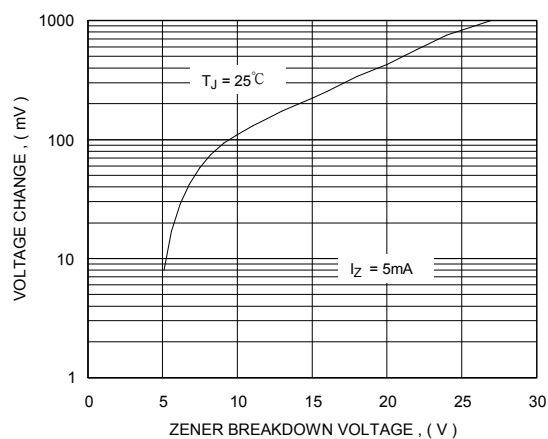
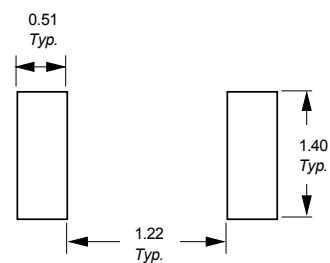


Fig.3 - TYPICAL CHANGE OF WORKING UNDER OPERATING



Recommended Mounting Pad Layout



All dimensions in millimeter

RATING AND CHARACTERISTIC CURVES
LZ52C-WS Series



Type Number	Marking Code	Zener Voltage Range (Note 1)		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
LZ52C5V1WS	5V1	5.00	5.20	5	50	520	0.1	1.0
LZ52C5V6WS	5V6	5.48	5.72	5	30	450	0.1	1.0
LZ52C6V2WS	6V2	6.08	6.32	5	10	200	0.1	2.0
LZ52C6V8WS	6V8	6.66	6.94	5	8	150	0.1	3.0
LZ52C7V5WS	7V5	7.35	7.65	5	7	50	0.1	5.0
LZ52C8V2WS	8V2	8.04	8.36	5	7	50	0.1	6.2
LZ52C9V1WS	9V1	8.92	9.28	5	10	50	0.1	6.8
LZ52C10WS	10	9.80	10.20	5	15	70	0.1	7.5
LZ52C11WS	11	10.78	11.22	5	20	70	0.1	8.2
LZ52C12WS	12	11.76	12.24	5	20	90	0.1	9.1
LZ52C13WS	13	12.74	13.26	5	26	110	0.1	10
LZ52C15WS	15	14.70	15.30	5	30	110	0.1	11
LZ52C16WS	16	15.68	16.32	5	40	170	0.1	12
LZ52C18WS	18	17.64	18.36	5	50	170	0.1	13
LZ52C20WS	20	19.60	20.40	5	52	220	0.1	15
LZ52C22WS	22	21.56	22.44	5	52	220	0.1	16
LZ52C24WS	24	23.52	24.48	5	80	220	0.1	18
LZ52C27WS	27	26.46	27.54	5	80	220	0.1	20
LZ52C30WS	30	29.40	30.60	5	80	220	0.1	22
LZ52C33WS	33	32.34	33.66	5	80	220	0.1	24
LZ52C36WS	36	35.28	36.72	5	80	220	0.1	27

NOTE1 : Tested with pulses, T_p < 100ms

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