

HZS-L Series

Silicon Epitaxial Planar Zener Diode for Low Noise Application

REJ03G0166-0200Z (Previous: ADE-208-121A) Rev.2.00 Jan.06.2004

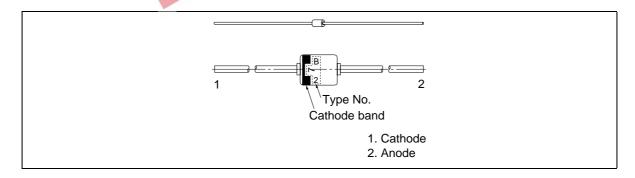
Features

- Diode noise level of this series is approximately 1/3-1/10 lower than the HZ series.
- Low leakage, low zener impedance and maximum power dissipation of 400 mW are ideally suited for stabilized power supply, etc.
- Wide spectrum from 5.2V through 38V of zener voltage provide flexible application.
- Suitable for 5mm-pitch high speed automatic insertion.

Ordering Information

Type No.	Mark	Package Code
HZS-L Series	Type No.	MHD

Pin Arrangement



Absolute Maximum Ratings

 $(Ta = 25^{\circ}C)$

Item	Symbol	Value	Unit
Power dissipation	Pd	400	mW
Junction temperature	Tj	200	°C
Storage temperature	Tstg	-55 to +175	°C

Electrical Characteristics

 $(Ta = 25^{\circ}C)$

		Zener Voltage			Reverse Current		Dynamic Resistance	
		V _z (V)* ¹		Test Condition	I _R (μA)	Test Condition	r _d (Ω)	Test Condition
Туре	Grade	Min	Max	Iz (mA)	Мах	V _R (V)	Max	I _Z (mA)
HZS6L	A1	5.2	5.5	0.5	1-0	2.0	150	0.5
	A2	5.3	5.6		.0			
	A3	5.4	5.7					
	B1	5.5	5.8				80	0.5
	B2	5.6	5.9					
	B3	5.7	6.0	_				
	C1	5.8	6.1	_			60	0.5
	C2	6.0	6.3	-				
	C3	6.1	6.4	_				
HZS7L	A1	6.3	6.6	0.5	1	3.5	60	0.5
	A2	6.4	6.7	-				
	A3	6.6	6.9	-				
	B1	6.7	7.0	_				
	B2	6.9	7.2	_				
	B3	7.0	7.3	_				
	C1	7.2	7.6	_				
	C2	7.3	7.7	_				
	C3	7.5	7.9	_				

Note: 1. Tested with DC.

HZS-L Series

	Zener Voltage		tage		Reverse Current		Dynamic Resistance	
		V _z (V)* ¹		Test Condition	I _R (μA)	Test Condition	r _d (Ω)	Test Condition
Туре	Grade	Min	Max	Iz (mA)	Max	V _R (V)	Max	I _Z (mA)
HZS9L	A1	7.7	8.1	0.5	1	6.0	60	0.5
	A2	7.9	8.3					
	A3	8.1	8.5					
	B1	8.3	8.7					
	B2	8.5	8.9					
	B3	8.7	9.1					
	C1	8.9	9.3	_				
	C2	9.1	9.5					
	C3	9.3	9.7			8.0		
HZS11L	A1	9.5	9.9	0.5	1	8.0	80	0.5
	A2	9.7	10.1		36	30		
	A3	9.9	10.3	40	37	C.		
	B1	10.2	10.6	43	2	U.		
	B2	10.4	10.8		C			
	B3	10.7	11.1		•			
	C1	10.9	11.3					
	C2	11.1	11.6					
	C3	11.4	11.9					
HZS12L	A1	11.6	12.1	0.5	1	10.5	80	0.5
	A2	11.9	12.4					
	A3	12.2	12.7					
	B1	12.4	12.9					
	B2	12.6	13.1					
	B3	12.9	13.4					
	C1	13.2	13.7					
	C2	13.5	14.0					
	C3	13.8	14.3					
HZS15L	1	14.1	14.7	0.5	1	13.0	80	0.5
	2	14.5	15.1	_				
	3	14.9	15.5	_				
HZS16L	1	15.3	15.9	0.5	1	14.0	80	0.5
	2	15.7	16.5	_				
	3	16.3	17.1	_				

Note: 1. Tested with DC.

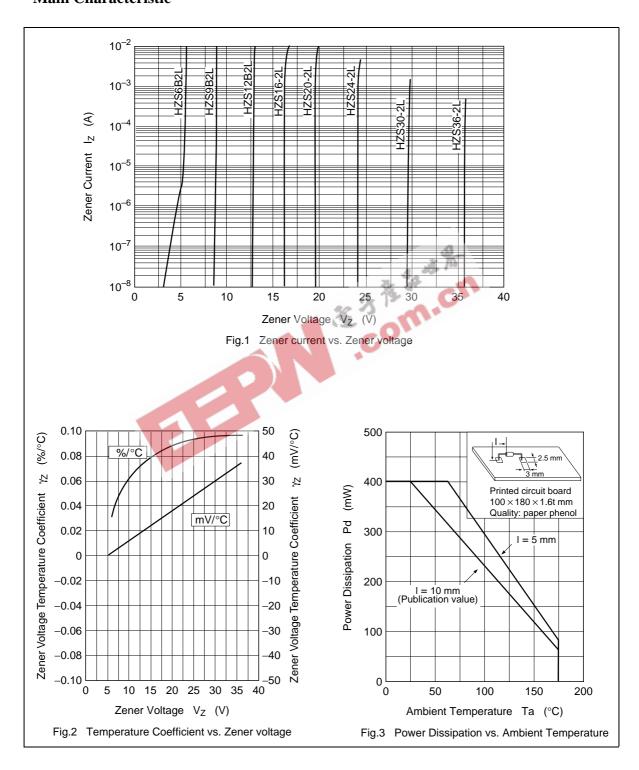
HZS-L Series

		Zener Voltage			Reverse Current		Dynamic Resistance	
		V _z (V)* ¹		Test Condition	I _R (μA)	Test Condition	r _d (Ω)	Test Condition
Туре	Grade	Min	Max	Iz (mA)	Max	V _R (V)	Max	I _Z (mA)
HZS18L	1	16.9	17.7	0.5	1	15.0	80	0.5
	2	17.5	18.3					
	3	18.1	19.0					
HZS20L	1	18.8	19.7	0.5	1	18.0	100	0.5
	2	19.5	20.4					
	3	20.2	21.1					
HZS22L	1	20.9	21.9	0.5	1	20.0	100	0.5
	2	21.6	22.6					
	3	22.3	23.3					
HZS24L	1	22.9	24.0	0.5	1	22.0	120	0.5
	2	23.6	24.7		-ðic	30		
	3	24.3	25.5	-	次海	C		
HZS27L	1	25.2	26.6	0.5	l-1	24.0	150	0.5
	2	26.2	27.6		C			
	3	27.2	28.6	1 / 1				
HZS30L	1	28.2	29.6	0.5	1	27.0	200	0.5
	2	29.2	30.6					
	3	30.2	31.6	_				
HZS33L	1	31.2	32.6	0.5	1	30.0	250	0.5
	2	32.2	33.6					
	3	33.2	34.6					
HZS36L	1	34.2	35.7	0.5	1	33.0	300	0.5
	2	35.3	36.8					
	3	36.4	38.0					

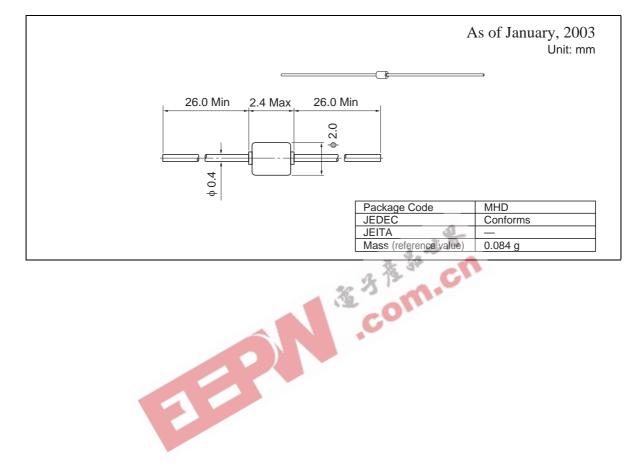
Notes: 1. Tested with DC.

2. Type No. is as follows; HZS6A1L, HZS6A2L, HZS36-3L

Main Characteristic



Package Dimensions



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