

# HZK-L Series

## Silicon Epitaxial Planar Zener Diodes for Stabilized Power Supply

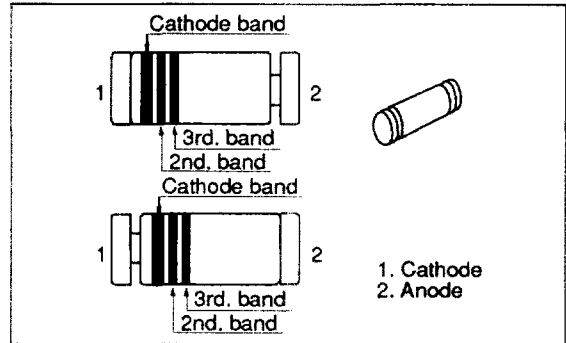
### Features

- Low leakage, low zener impedance and maximum power dissipation of 400 mW.
- Wide spectrum from 5.2V through 38V of zener voltage provide flexible application.
- LLD package is suitable for high density surface mounting and high speed assembly.

### Ordering Information

Type No.	Mark	Package Code
HZK-L Series	Color Code	LLD

### Outline



### Absolute Maximum Ratings (Ta = 25°C)

Item	Symbol	Value	Unit
Power dissipation	$P_d^*$	400	mW
Junction temperature	$T_j$	175	°C
Storage temperature	$T_{stg}$	-55 to +175	°C

\* With P.C. Board.

### Electrical Characteristics (Ta = 25°C)

Type	Grade	Zener Voltage		Test Condition $I_Z$ (mA)	Reverse Current		Dynamic Resistance	
		$V_Z$ (V) *			$I_R$ (μA)	Test Condition $V_R$ (V)	$r_d$ (Ω)	Test Condition $I_Z$ (mA)
		Min	Max		Max		Max	
HZK6L	A	5.2	5.7	0.5	1	2.0	150	0.5
	B	5.5	6.0				80	
	C	5.8	6.4				60	
HZK7L	A	6.3	6.9	0.5	1	3.5	60	0.5
	B	6.7	7.3					
	C	7.2	7.9					

\* Tested with DC.

## HZK-L Series

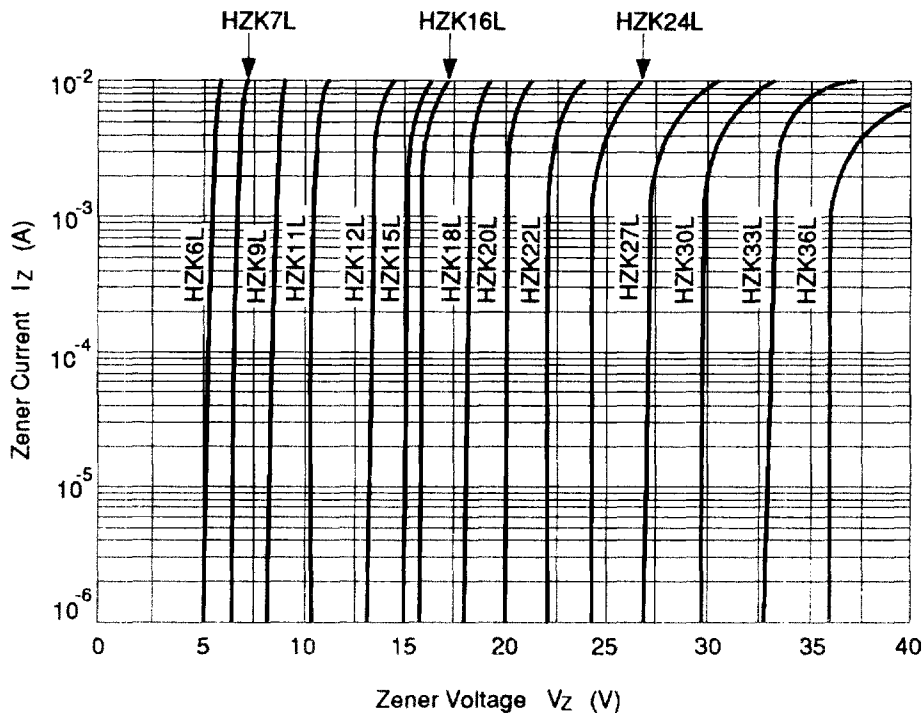
Type	Grade	Zener Voltage		Test Condition $I_Z$ (mA)	Reverse Current		Dynamic Resistance	
		$V_Z$ (V) *			$I_R$ ( $\mu$ A)	Test Condition	$r_d$ ( $\Omega$ )	Test Condition
		Min	Max	Max	$V_R$ (V)	Max	$I_Z$ (mA)	
HZK9L	A	7.7	8.5	0.5	1	6.0	60	0.5
	B	8.3	9.1					
	C	8.9	9.7					
HZK11L	A	9.5	10.3	0.5	1	8.0	80	0.5
	B	10.2	11.1					
	C	10.9	11.9					
HZK12L	A	11.6	12.7	0.5	1	10.5	80	0.5
	B	12.4	13.4					
	C	13.2	14.3					
HZK15L		14.1	15.5	0.5	1	13.0	80	0.5
HZK16L		15.3	17.1	0.5	1	14.0	80	0.5
HZK18L		16.9	19.0	0.5	1	15.0	80	0.5
HZK20L		18.8	21.1	0.5	1	18.0	100	0.5
HZK22L		20.9	23.3	0.5	1	20.0	100	0.5
HZK24L		22.9	25.5	0.5	1	22.0	120	0.5
HZK27L		25.2	28.6	0.5	1	24.0	150	0.5
HZK30L		28.2	31.6	0.5	1	27.0	200	0.5
HZK33L		31.2	34.6	0.5	1	30.0	250	0.5
HZK36L		34.2	38.0	0.5	1	33.0	300	0.5

\* Tested with DC.

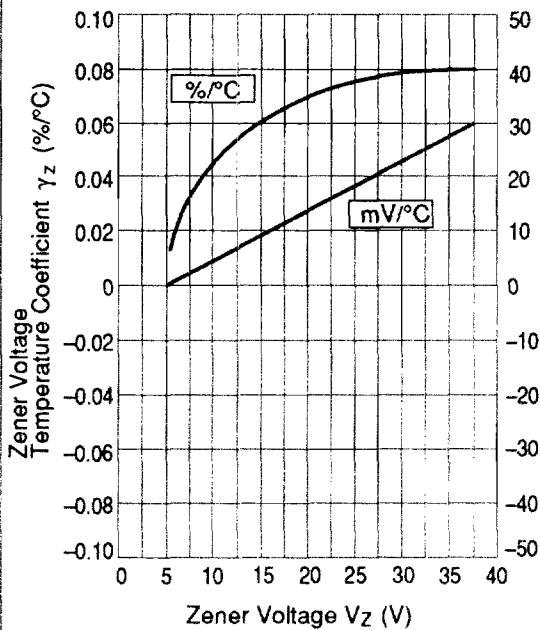
Note: Type No. is as follows: HZK6AL, HZK6BL, ... HZK36L.

**MARK COLOR CODE**

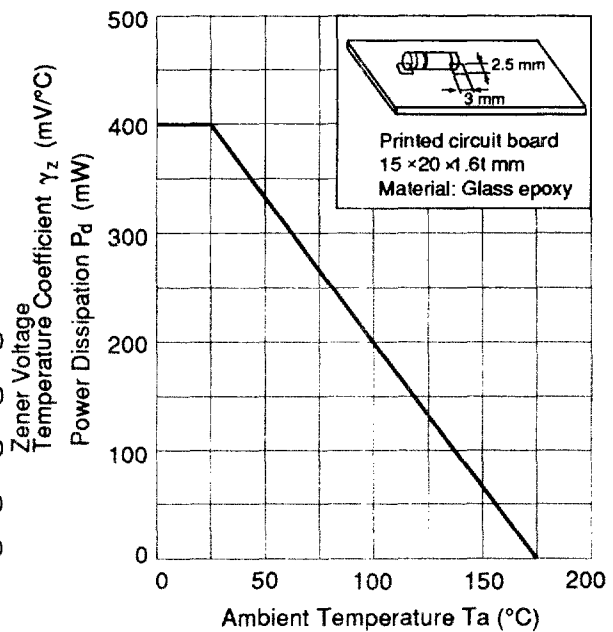
<b>Type</b>	<b>Cathode Band</b>	<b>Second Band</b>	<b>Third Band</b>
HZK6AL	Orange	Verdure	Pink
HZK6BL	Orange	Verdure	Verdure
HZK6CL	Orange	Verdure	Light Blue
HZK7AL	Orange	Yellow Green	Pink
HZK7BL	Orange	Yellow Green	Verdure
HZK7CL	Orange	Yellow Green	Light Blue
HZK9AL	Orange	Purple	Pink
HZK9BL	Orange	Purple	Verdure
HZK9CL	Orange	Purple	Light Blue
HZK11AL	Orange	Light Blue	Pink
HZK11BL	Orange	Light Blue	Verdure
HZK11CL	Orange	Light Blue	Light Blue
HZK12AL	Orange	White	Pink
HZK12BL	Orange	White	Verdure
HZK12CL	Orange	White	Light Blue
HZK15L	Yellow	Black	Pink
HZK16L	Yellow	Yellow Ocher	Pink
HZK18L	Yellow	Pink	Pink
HZK20L	Yellow	Orange	Pink
HZK22L	Yellow	Yellow	Pink
HZK24L	Yellow	Verdure	Pink
HZK27L	Yellow	Yellow Green	Pink
HZK30L	Yellow	Purple	Pink
HZK33L	Yellow	Light Blue	Pink
HZK36L	Yellow	White	Pink



**Fig.1 Zener current Vs. Zener voltage**



**Fig.2 Temperature Coefficient Vs. Zener voltage**



**Fig.3 Power Dissipation Vs. Ambient Temperature**