

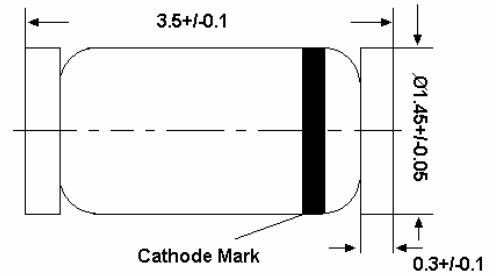
# HZK Series

## SILICON EPITAXIAL PLANAR ZENER DIODES for Stabilized Power Supply

LL-34

### Features

- LLD package is suitable for high-density surface mounting and high speed assembly.
- Low leakage, low zener impedance and maximum power dissipation of 500 mW.
- Wide spectrum from 1.9V through 38V of zener voltage provide flexible application.

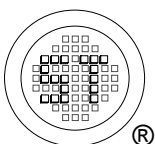


**Glass case MiniMELF**  
**Dimensions in mm**

### Absolute Maximum Ratings ( $T_a = 25^\circ\text{C}$ )

	Symbol	Value	Unit
Power Dissipation	$P_{\text{tot}}$	500	mW
Junction Temperature	$T_j$	175	$^\circ\text{C}$
Storage Temperature Range	$T_s$	-55 to +175	$^\circ\text{C}$

Note: With P.C. Board.



**SEMTECH ELECTRONICS LTD.**

(Subsidiary of Sino-Tech International Holdings Limited, a company listed on the Hong Kong Stock Exchange, Stock Code: 724)



ISO/TS 16949 : 2002  
Certificate No. 05103



ISO 14001:2004  
Certificate No. 71116



ISO 9001:2000  
Certificate No. 0506098

Dated : 22/01/2005

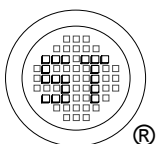
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## Electrical Characteristics ( $T_a = 25^\circ\text{C}$ )

TYPE	Zener Voltage			Reverse Current		Dynamic Resistance	
	$V_Z$ (V) <sup>(1)</sup>			$I_R$ ( $\mu\text{A}$ )		$r_d$ ( $\Omega$ )	
	Min.	Max.	$I_Z$ (mA)	Max.	$V_R$ (V)	Max.	$I_Z$ (mA)
HZK2B	1.9	2.3	5	5	0.5	100	5
HZK2C	2.2	2.6					
HZK3A	2.5	2.9					
HZK3B	2.8	3.2	5	5	0.5	100	5
HZK3C	3.1	3.5					
HZK4A	3.4	3.8					
HZK4B	3.7	4.1	5	5	1.0	100	5
HZK4C	4.0	4.4					
HZK5A	4.3	4.7					
HZK5B	4.6	5.0	5	5	1.5	100	5
HZK5C	4.9	5.3					
HZK6A	5.2	5.7					
HZK6B	5.5	6.0	5	5	2	40	5
HZK6C	5.8	6.4					
HZK7A	6.3	6.9					
HZK7B	6.7	7.3	5	1	3.5	15	5
HZK7C	7.2	7.9					
HZK9A	7.7	8.5					
HZK9B	8.3	9.1	5	1	5	20	5
HZK9C	8.9	9.7					
HZK11A	9.5	10.3					
HZK11B	10.2	11.1	5	1	7.5	25	5
HZK11C	10.9	11.9					
HZK12A	11.6	12.7					
HZK12B	12.4	13.4	5	1	9.5	35	5
HZK12C	13.2	14.3					
HZK15	14.1	15.5					
HZK16	15.3	17.1	5	1	12	45	5
HZK18	16.9	19.0	5	1	13	55	5
HZK20	18.8	21.1	2	1	15	60	2
HZK22	20.9	23.3	2	1	17	65	2
HZK24	22.9	25.5	2	1	19	70	2
HZK27	25.2	28.6	2	1	21	80	2
HZK30	28.2	31.6	2	1	23	100	2
HZK33	31.2	34.6	2	1	25	120	2
HZK36	34.2	38.0	2	1	27	140	2

Note: 1). Tested with DC

2). Tested with pulses  $t_p = 20$  ms.



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Fig.1- Zener current versus zener voltage

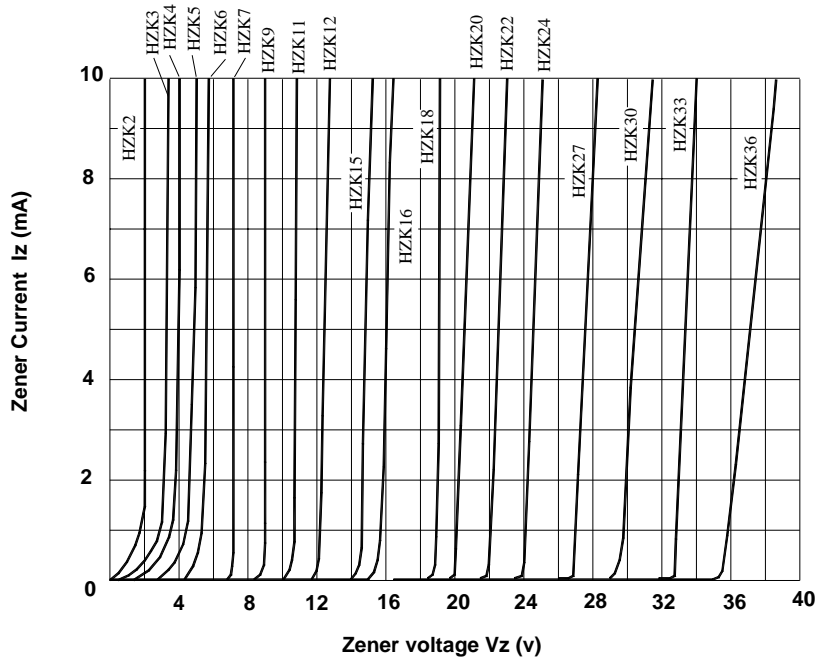


Fig.2 Temperature Coefficient Vs. Zener voltage

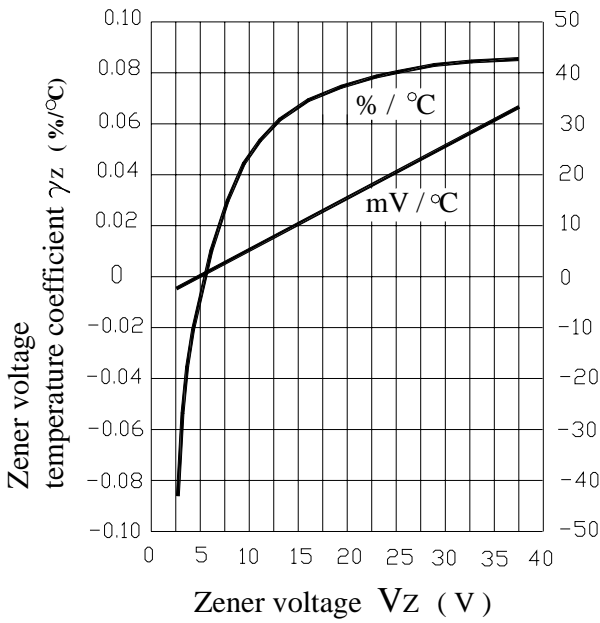
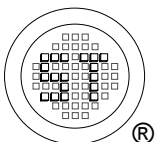
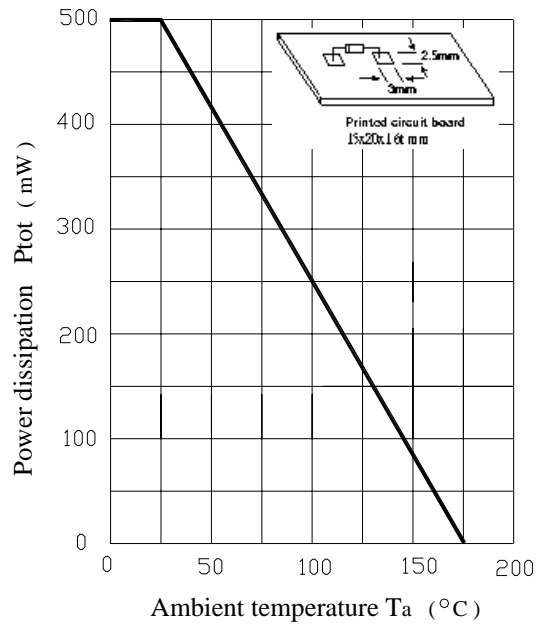


Fig. 3 Power dissipation Vs. Ambient temperature



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