

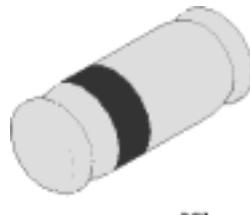


# FHZ2V4~FHZ39V

## Silicon Z-Diodes

### Features

- Very sharp reverse characteristic
- Very high stability
- Low reverse current level
- Vz-tolerance  $\pm 5\%$



### Applications

Voltage stabilization

### Absolute Maximum Ratings

Parameter	Test Conditions	Type	Symbol	Value	Unit
Power dissipation 耗散功率	$R_{thJA} < 300 \text{K/W}$ , $T_{amb}=25^\circ\text{C}$		Pv	500	mW
Z-current 稳压电流			Iz	$P_v/V_z$	mA
Junction temperature 结温			Tj	175	°C
Storage temperature range 储存温度			Tstg	-65...+175	°C

### Maximum Thermal Resistance

Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	on PC board 50mmx50mmx1.6mm	$R_{thJA}$	500	K/W

### Electrical Characteristics

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_f=100\text{mA}$		$V_F$			1.2	V

Type	$V_{Znom}^{1)}$	Test current $I_{ZT}$	Maximum zeber Impedance		Maximum Reverse Leakage Current		Forward Voltage	Temperature coefficient
			$Z_{ZT}$ at $I_{ZT}$	$Z_{Zk}$ at $I_{Zk}=1\text{mA}$	$I_R$	Test-Voltage		
			V	mA	Ohm	Ohm	$\mu\text{A}$	Volts
FHZ2V4	2.28-2.56	5	85	600	50	1.0	1.2	-0.070
FHZ2V7	2.5-2.9	5	85	600	10	1.0	1.2	-0.070



Type	V <sub>Znom</sub> <sup>1)</sup>	Test current I <sub>ZT</sub>	Maximum zeber Impedance		Maximum Reverse Leakage Current		Forward Voltage	Temperature coefficient
			Z <sub>ZT</sub> at I <sub>ZT</sub>	Z <sub>ZK</sub> at I <sub>ZK</sub> =1mA	I <sub>R</sub>	Test-Voltage		
	V	mA	Ohm	Ohm	μA	Volts	V	%/°C
FHZ3V0	2.8-3.2	5	85	600	4	1.0	1.2	-0.070
FHZ3V3	3.1-3.5	5	85	600	2	1.0	1.2	-0.065
FHZ3V6	3.4-3.8	5	85	600	2	1.0	1.2	-0.060
FHZ3V9	3.7-4.1	5	85	600	2	1.0	1.2	-0.050
FHZ4V3	4.0-4.6	5	75	600	1	1.0	1.2	-0.025
FHZ4V7	4.4-5.0	5	60	600	0.5	1.0	1.2	-0.010
FHZ5V1	4.8-5.4	5	35	550	0.1	1.0	1.2	+0.015
FHZ5V6	5.2-6.0	5	25	450	0.1	1.0	1.2	+0.025
FHZ6V2	5.8-6.6	5	10	200	0.1	2.0	1.2	+0.035
FHZ6V8	6.4-7.2	5	8	150	0.1	3.0	1.2	+0.045
FHZ7V5	7.0-7.9	5	7	50	0.1	5.0	1.2	+0.050
FHZ8V2	7.7-8.7	5	7	50	0.1	6.0	1.2	+0.050
FHZ9V1	8.5-9.6	5	10	50	0.1	7.0	1.2	+0.060
FHZ10V	9.4-10.6	5	15	70	0.1	7.5	1.2	+0.070
FHZ11V	10.4-11.6	5	20	70	0.1	85	1.2	+0.070
FHZ12V	11.4-12.7	5	20	90	0.1	90	1.2	+0.070
FHZ13V	12.4-14.1	5	26	110	0.1	10	1.2	+0.070
FHZ15V	13.8-15.6	5	30	110	0.1	11	1.2	+0.070
FHZ16V	15.3-17.1	5	40	170	0.1	12	1.2	+0.070
FHZ18V	16.8-19.1	5	50	170	0.1	14	1.2	+0.070
FHZ20V	18.8-21.2	5	55	220	0.1	15	1.2	+0.070
FHZ22V	20.8-23.3	5	55	220	0.1	17	1.2	+0.070
FHZ24V	22.8-25.6	5	80	220	0.1	18	1.2	+0.080
FHZ27V	25.1-28.9	5	80	220	0.1	20	1.2	+0.080



Type	V <sub>Znom</sub> <sup>1)</sup>	Test current I <sub>ZT</sub>	Maximum zeber Impedance		Maximum Reverse Leakage Current		Forward Voltage	Temperature coefficient
			Z <sub>ZT</sub> at I <sub>ZT</sub>	Z <sub>ZK</sub> at I <sub>ZK</sub> =1mA	I <sub>R</sub>	Test-Voltage		
	V	mA	Ohm	Ohm	μA	Volts	V	%/°C
FHZ30V	28-32	5	80	220	0.1	22	1.2	+0.080
FHZ33V	31-35	5	80	220	0.1	24	1.2	+0.080
FHZ36V	34-38	5	80	220	0.1	27	1.2	+0.080
FHZ39V	37-41	5	90	500	0.1	30	1.2	+0.080

<sup>1)</sup> Based on dc-measurement at thermal equilibrium; case temperature maintained at 30°C ± 2°C.

<sup>2)</sup> SUFFIX " A " FOR ±1%

SUFFIX " B " FOR ±2%

SUFFIX " C " FOR ±5%

SUFFIX " D " FOR ±20%

## Dimensions in mm

