

## Silicon Power Z-Diodes

### Features

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



### Applications

Voltage stabilization

### Absolute Maximum Ratings

$T_j = 25^\circ\text{C}$

Parameter	Test Conditions	Type	Symbol	Value	Unit
Power dissipation	$T_{amb} \leq 50^\circ\text{C}$		$P_V$	1	W
Z-current			$I_Z$	$P_V/V_Z$	mA
Junction temperature			$T_j$	200	$^\circ\text{C}$
Storage temperature range			$T_{stg}$	-65...+200	$^\circ\text{C}$

### Maximum Thermal Resistance

$T_j = 25^\circ\text{C}$

Parameter	Test Conditions	Symbol	Value	Unit
Junction ambient	$l=9.5\text{mm (3/8")}$ , $T_L=\text{constant}$	$R_{thJA}$	100	K/W

### Electrical Characteristics

$T_j = 25^\circ\text{C}$

Parameter	Test Conditions	Type	Symbol	Min	Typ	Max	Unit
Forward voltage	$I_F=200\text{mA}$		$V_F$			1.2	V



## 1N4728A...1N4761A

Type	$V_{Znom}^{1)}$	$I_{ZT}$	for	$r_{zIT}$	$r_{zik}$	at	$I_{ZK}$	$I_R$	at	$V_R$
1N4728A	3.3	76		< 10	< 400		1.0	< 100		1
1N4729A	3.6	69		< 10	< 400		1.0	< 100		1
1N4730A	3.9	64		< 9	< 400		1.0	< 50		1
1N4731A	4.3	58		< 9	< 400		1.0	< 10		1
1N4732A	4.7	53		< 8	< 500		1.0	< 10		1
1N4733A	5.1	49		< 7	< 550		1.0	< 10		1
1N4734A	5.6	45		< 5	< 600		1.0	< 10		2
1N4735A	6.2	41		< 2	< 700		1.0	< 10		3
1N4736A	6.8	37		< 3.5	< 700		1.0	< 10		4
1N4737A	7.5	34		< 4.0	< 700		0.5	< 10		5
1N4738A	8.2	31		< 4.5	< 700		0.5	< 10		6
1N4739A	9.1	28		< 5.0	< 700		0.5	< 10		7
1N4740A	10	25		< 7	< 700		0.25	< 10		7.6
1N4741A	11	23		< 8	< 700		0.25	< 5		8.4
1N4742A	12	21		< 9	< 700		0.25	< 5		9.1
1N4743A	13	19		< 10	< 100		0.25	< 5		9.9
1N4744A	15	17		< 14	< 700		0.25	< 5		11.4
1N4745A	16	15.5		< 16	< 700		0.25	< 5		12.2
1N4746A	18	14		< 20	< 750		0.25	< 5		13.7
1N4747A	20	12.5		< 22	< 750		0.25	< 5		15.2
1N4748A	22	11.5		< 23	< 750		0.25	< 5		16.7
1N4749A	24	10.5		< 25	< 750		0.25	< 5		18.2
1N4750A	27	9.5		< 35	< 750		0.25	< 5		20.6
1N4751A	30	8.5		< 40	< 1000		0.25	< 5		22.8
1N4752A	33	7.5		< 45	< 1000		0.25	< 5		25.1
1N4753A	36	7.0		< 50	< 1000		0.25	< 5		27.4
1N4754A	39	6.5		< 60	< 1000		0.25	< 5		29.7
1N4755A	43	6.0		< 70	< 1500		0.25	< 5		32.7
1N4756A	47	5.5		< 80	< 1500		0.25	< 5		35.8
1N4757A	51	5.0		< 95	< 1500		0.25	< 5		38.8
1N4758A	56	4.5		< 110	< 2000		0.25	< 5		42.6
1N4759A	62	4.0		< 125	< 2000		0.25	< 5		47.1
1N4760A	68	3.7		< 150	< 2000		0.25	< 5		51.7
1N4761A	75	3.3		< 175	< 2000		0.25	< 5		56.0

1) Based on dc-measurement at thermal equilibrium while maintaining the lead temperature ( $T_L$ ) at 30°C + 1°C, 9.5mm (3/8") from the diode body.