



## Features:

- High reliability.
- Very sharp reverse characteristic.
- Low reverse current level.
- $V_z$ -tolerance  $\pm 5\%$ .

## Application:

Voltage stabilization.

## Absolute Maximum Ratings $T_j = 25^\circ\text{C}$

Parameter	Test Conditions	Symbol	Value	Unit
Power dissipation	$T_{\text{amb}} \leq 50^\circ\text{C}$	$P_v$	1	W
Z-current	-	$I_z$	$P_v / V_z$	mA
Junction temperature	-	$T_j$	200	°C
Storage temperature range	-	$T_{\text{stg}}$	-65 to +175	

## Maximum Thermal Resistance $T_j = 25^\circ\text{C}$

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

Stresses exceeding maximum ratings may damage the device. Maximum ratings are stress ratings only. Functional operation above the recommended operating conditions is not implied. Extended exposure to stresses above the recommended operating conditions may affect device reliability.

## Electrical Characteristics $T_j = 25^\circ\text{C}$

Parameter	Test Conditions	Symbol	Maximum	Unit
Forward voltage	$I_F = 200 \text{ mA}$	$V_F$	1.2	V

# Zener Diode



Specification Table

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

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

勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-34970699  
 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

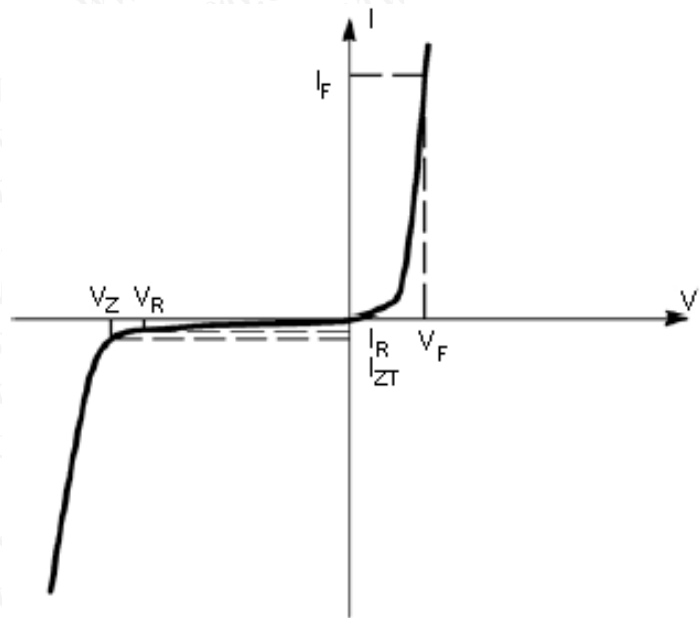


# Zener Diode

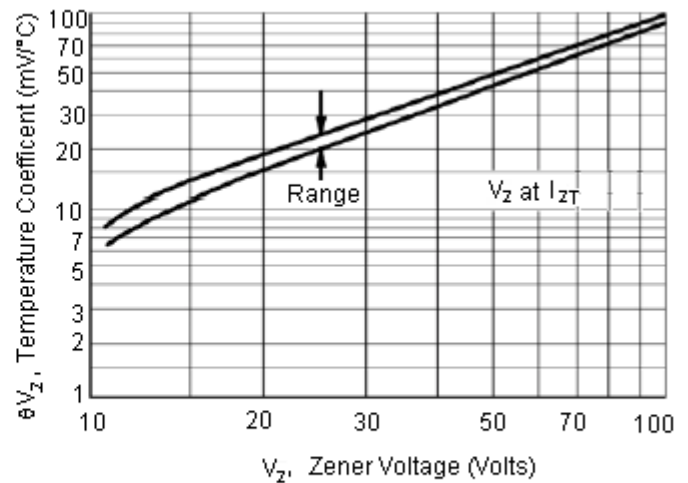
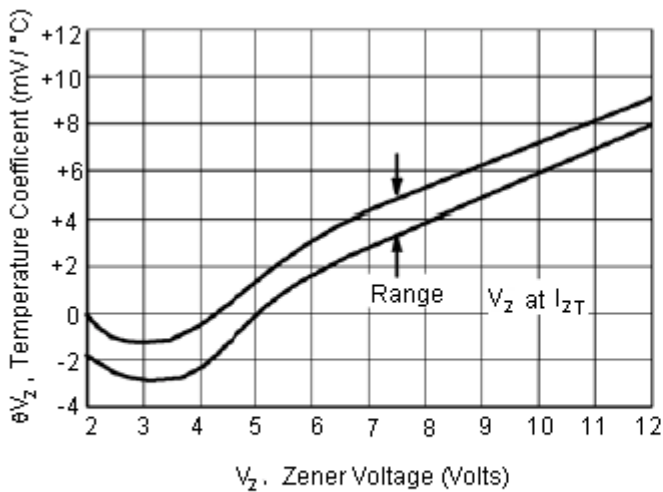


Characteristics ( $T_j = 25^\circ\text{C}$  unless otherwise specified)

Symbol	Parameter
$V_Z$	Reverse zener voltage at $I_{ZT}$
$I_{ZT}$	Reverse current
$Z_{ZT}$	Maximum zener impedance at $I_{ZT}$
$I_{ZK}$	Reverse current
$Z_{ZK}$	Maximum zener impedance at $I_{ZK}$
$I_R$	Reverse leakage current at $V_R$
$V_R$	Breakdown voltage
$I_F$	Forward current
$V_F$	Forward voltage at $I_F$



Zener Voltage Regulator



Temperature Coefficients

( $-55^\circ\text{C}$  to  $+150^\circ\text{C}$  temperature range; 90% of the units are in the ranges indicated)

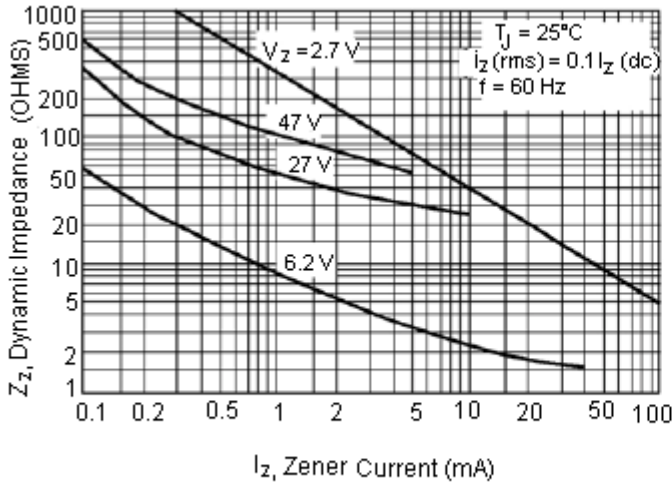
勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-34970699  
 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)



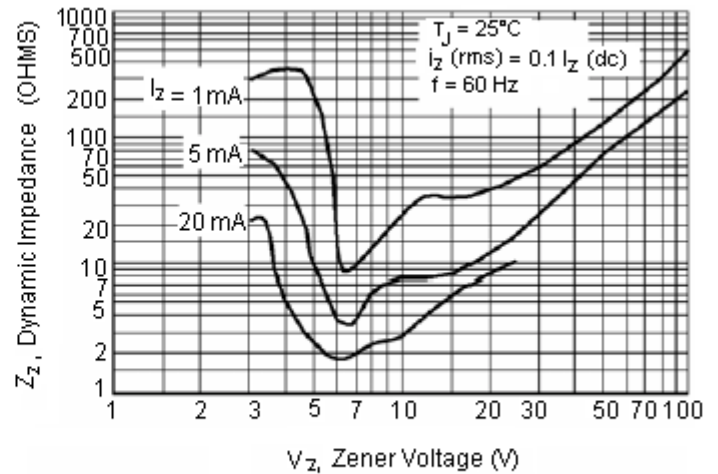
# Zener Diode



## Characteristics ( $T_j = 25^\circ\text{C}$ unless otherwise specified)

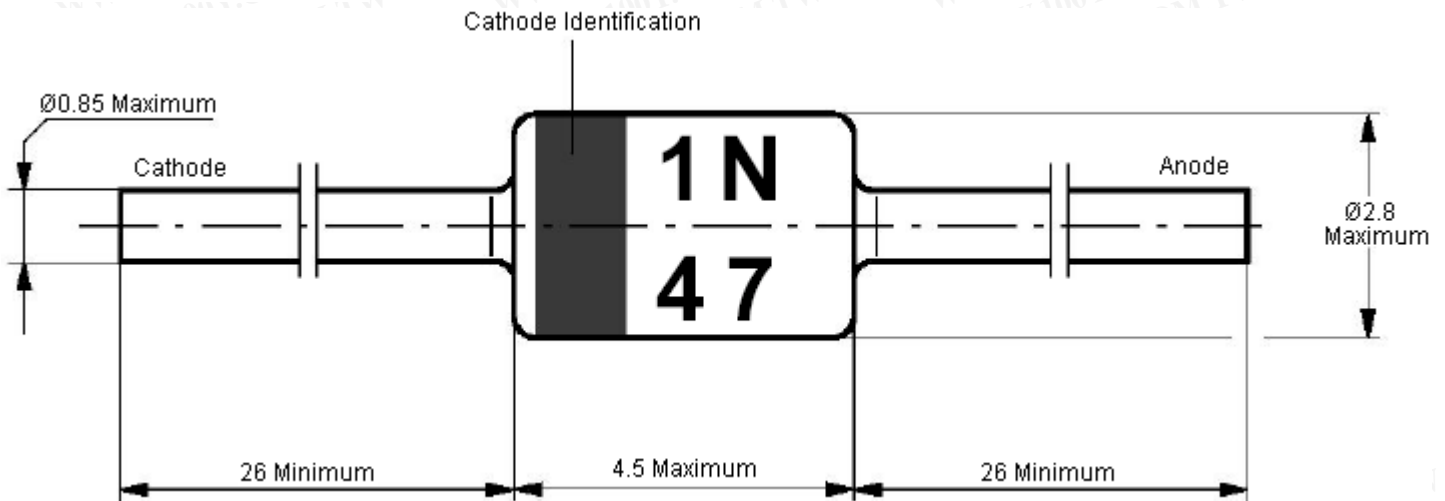


Effect of Zener Current on Zener Impedance



Effect of Zener Voltage on Zener Impedance

## Dimensions



Standard Glass case  
JEDEC DO-41

Dimensions: Millimetres

**Disclaimer** This data sheet and its contents (the "Information") belong to the Premier Farnell Group (the "Group") or are licensed to it. No licence is granted for the use of it other than for information purposes in connection with the products to which it relates. No licence of any intellectual property rights is granted. The Information is subject to change without notice and replaces all data sheets previously supplied. The Information supplied is believed to be accurate but the Group assumes no responsibility for its accuracy or completeness, any error in or omission from it or for any use made of it. Users of this data sheet should check for themselves the Information and the suitability of the products for their purpose and not make any assumptions based on information included or omitted. Liability for loss or damage resulting from any reliance on the Information or use of it (including liability resulting from negligence or where the Group was aware of the possibility of such loss or damage arising) is excluded. This will not operate to limit or restrict the Group's liability for death or personal injury resulting from its negligence. SPC Multicomp is the registered trademark of the Group. © Premier Farnell plc 2011.

勝特力材料 886-3-5753170  
 勝特力电子(上海) 86-21-34970699  
 勝特力电子(深圳) 86-755-83298787  
[Http://www.100y.com.tw](http://www.100y.com.tw)

