

### Surface Mount Zener Diodes

**(Pb)** Lead(Pb)-Free

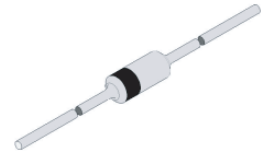
**SMALL SIGNAL  
ZENER DIODES  
0.5WATTS**

**Features:**

- \* High Rliability
- \* Very Sharp Reverse Characteristic
- \* Low Reverse Current Level
- \* VZ-Tolerance  $\pm 5\%$

**Mechanical Data:**

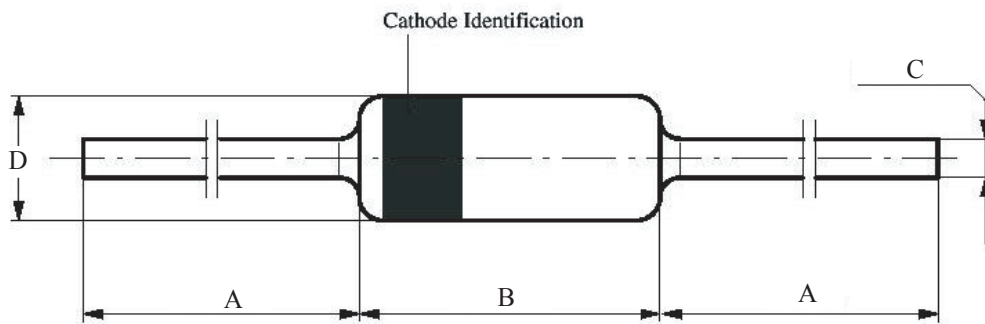
- \* Voltage stabilization
- \* Case : DO-35 Glass Case
- \* Weight : Approx 0.13 gram



**DO-35**

### DO-35 Outline Dimensions

Unit:mm



DIM	A		B		C		D	
	Min	Max	Min	Max	Min	Max	Min	Max
DO-35	26.0	-	-	4.20	-	0.55	-	2.0

**Maximum Ratings and Electrical Characteristics (TA=25°C Unless Otherwise Noted)**

Parameter	Symbol	Value	Unit
Power dissipation $T_{amb} \leq 75^{\circ}\text{C}$	$P_V$	500	mW
Z-current	$I_Z$	$P_V/V_Z$	mA
Junction ambient $l=9.5\text{mm}(3/8")T_L=\text{constant}$	$R_{\theta JA}$	300	K/W
Junction temperature	$T_j$	200	$^{\circ}\text{C}$
Storage temperature range	$T_{stg}$	-65~+200	$^{\circ}\text{C}$

**Electrical Characteristics**

Parameter	Symbol	Min	Typ	Max	Unit
Forward voltage $I_F=200\text{mA}$	$V_F$	-	-	1.1	V

Type	$V_{Znom}^{1)}$	$I_{ZT}$	for	$r_{zT}$	$r_{zK}$	@	$I_{ZK}$	$I_R$	@	$V_R$	$TK_{VZ}$
	V	mA		$\Omega$	$\Omega$		mA	$\mu A$		V	%/K
1N5221B	2.4	20		<30	<1200		0.25	<100		1.0	<-0.085
1N5222B	2.5	20		<30	<1250		0.25	<100		1.0	<-0.085
1N5223B	2.7	20		<30	<1300		0.25	<75		1.0	<-0.080
1N5224B	2.8	20		<30	<1400		0.25	<75		1.0	<-0.080
1N5225B	3.0	20		<29	<1600		0.25	<50		1.0	<-0.075
1N5226B	3.3	20		<28	<1600		0.25	<25		1.0	<-0.070
1N5227B	3.6	20		<24	<1700		0.25	<15		1.0	<-0.065
1N5228B	3.9	20		<23	<1900		0.25	<10		1.0	<-0.060
1N5229B	4.3	20		<22	<2000		0.25	<5		1.0	<+0.055
1N5230B	4.7	20		<19	<1900		0.25	<5		2.0	<+0.030
1N5231B	5.1	20		<17	<1600		0.25	<5		2.0	<+0.030
1N5232B	5.6	20		<11	<1600		0.25	<5		3.0	<+0.038
1N5233B	6.0	20		<7	<1600		0.25	<5		3.5	<+0.038
1N5234B	6.2	20		<7	<1000		0.25	<5		4.0	<+0.045
1N5235B	6.8	20		<5	<750		0.25	<3		5.0	<+0.050
1N5236B	7.5	20		<6	<500		0.25	<3		6.0	<+0.058
1N5237B	8.2	20		<8	<500		0.25	<3		6.5	<+0.062
1N5238B	8.7	20		<8	<600		0.25	<3		6.5	<+0.065
1N5239B	9.1	20		<10	<600		0.25	<3		7.0	<+0.068
1N5240B	10	20		<17	<600		0.25	<3		8.0	<+0.075
1N5241B	11	20		<22	<600		0.25	<2		8.4	<+0.076
1N5242B	12	20		<30	<600		0.25	<1		9.1	<+0.077
1N5243B	13	9.5		<13	<600		0.25	<0.5		9.9	<+0.079
1N5244B	14	9.0		<15	<600		0.25	<0.1		10	<+0.082
1N5245B	15	8.5		<16	<600		0.25	<0.1		11	<+0.082
1N5246B	16	7.8		<17	<600		0.25	<0.1		12	<+0.083
1N5247B	17	7.4		<19	<600		0.25	<0.1		13	<+0.084
1N5248B	18	7.0		<21	<600		0.25	<0.1		14	<+0.085
1N5249B	19	6.6		<23	<600		0.25	<0.1		15	<+0.086
1N5250B	20	6.2		<25	<600		0.25	<0.1		16	<+0.086
1N5251B	22	5.6		<29	<600		0.25	<0.1		17	<+0.087
1N5252B	24	5.2		<33	<600		0.25	<0.1		18	<+0.088
1N5253B	25	5.0		<35	<600		0.25	<0.1		19	<+0.089
1N5254B	27	4.6		<41	<600		0.25	<0.1		21	<+0.090
1N5255B	28	4.5		<44	<600		0.25	<0.1		21	<+0.091
1N5256B	30	4.2		<49	<600		0.25	<0.1		23	<+0.091
1N5257B	33	3.8		<58	<700		0.25	<0.1		25	<+0.092
1N5258B	36	3.4		<70	<700		0.25	<0.1		27	<+0.093
1N5259B	39	3.2		<80	<800		0.25	<0.1		30	<+0.094
1N5260B	43	3.0		<93	<900		0.25	<0.1		33	<+0.095
1N5261B	47	2.7		<105	<1000		0.25	<0.1		36	<+0.095
1N5262B	51	2.5		<125	<1100		0.25	<0.1		39	<+0.096
1N5263B	56	2.2		<150	<1300		0.25	<0.1		43	<+0.096
1N5264B	60	2.1		<170	<1400		0.25	<0.1		46	<+0.097
1N5265B	62	2.0		<185	<1400		0.25	<0.1		47	<+0.097
1N5266B	68	1.8		<230	<1600		0.25	<0.1		52	<+0.097
1N5267B	75	1.7		<270	<1700		0.25	<0.1		58	<+0.098

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